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ABSTRACT

Through the leadership of the Mississippi Board of Education, the Mississippi Department of Education conducted two separate studies of the reading programs offered in the state. The first study examined statewide trends in reading achievement and compared selected school districts' data with data from the National Assessment of Educational Progress. Data were then compiled into profiles in which school district achievement scores were grouped into 3 categories: high, mid-range, and low. Although differences in practices between high and low achieving districts were noted, conclusions were not offered as to the degree to which any single factor may have impacted reading achievement. The second study identified characteristics of the reading programs in 107 Mississippi schools and correlated those characteristics to factors which might impact achievement. Each of the schools in the second study participated in Chapter 1 with an average poverty level of greater than 90% according to data from the National School Lunch Program. Reading achievement scores were correlated to variables such as staff development activities, reading readiness programs, early intervention efforts, and summer school programs. (Contains 25 unnumbered charts and 5 figures of data. Appendixes provide 2 survey instruments.) (RS)

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REACHING NEW HEIGHTS IN READING

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Reading Studies Prepared for the State Board of Education

Mississippi Department of Education
P. O. Box 771
Jackson, Mississippi 39205

Tom Burnham, Superintendent

Summer 1995

A Message from the Chairman

The State Board of Education believes a well rounded educational program is a child's opportunity to enjoy a productive life in our expanding world. We also feel that basic skills in reading will make the most difference in the quality of the education a child receives. We are acting with a commitment and sense of urgency to continue to improve the reading ability of Mississippi's children in such a manner that will have maximum impact in the least amount of time possible. Studies found in this publication will help provide information on the status of critical issues of basic reading skills.

We are intent on maintaining high expectations of our students, schools, and Department of Education. We have established clear goals concerning the importance of reading and now intend to focus our efforts and available resources toward the advancement of reading in Mississippi. We will continue to search for ways to allow teachers to teach and students to learn in positive, supportive school environments with reading as our priority in providing a solid educational program.

Charles M. Deaton, Chairman
State Board of Education

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Introduction

Through the leadership of the Mississippi Board of Education the Mississippi Department of Education conducted two separate studies of the reading programs offered within the state. The purpose of the studies is to provide schools and districts with information concerning programs which have a positive impact on reading scores among children in Mississippi. Included in the results of the studies are (1) a description of the reading process, (2) an analysis of the results of reading scores on standardized achievement tests, and (3) their relationship to overall academic success.

The first of the studies, conducted by the Office of Instructional Development, sought to examine statewide trends in reading achievement and compare selected school districts data with data from the National Assessment of Educational Progress (NAEP). This information was then compiled into profiles in which school district achievement scores were grouped into three categories: high, mid-range, and low. In each profile, a compilation of responses to individual survey questions from the study is represented. Although differences in practices between high and low achieving districts were noted, conclusions were not offered as to the degree to which any single factor may have impacted reading achievement.

The Office of Compensatory Education completed a second study in which characteristics of the reading programs in 107 Mississippi schools were identified and correlated to factors which might impact achievement. Each of the schools responding participated in Chapter 1 with an average poverty level of greater than 90 percent according to data from the National School Lunch Program. Reading achievement scores in this study were correlated to variables such as staff development activities, reading readiness programs, early intervention efforts, and summer school programs.

Study One

A Profile of Reading Instruction for Mississippi Students

By the staff of the
Office of Academic Education, Instructional Development
Jo Prather, Reading (K-12)/Early Childhood Director

Abstract

The Office of Academic Education conducted a study to examine the status of reading in Mississippi's public schools. The purpose of the study is twofold: (1) to examine reading test scores to determine Mississippi students' level of performance; and (2) to determine the significance of selected educational variables in profiling reading instruction in 45 selected school districts.

Test scores on the reading section of the Stanford Achievement Test are examined for the years 1988-1994. Results are depicted in graph form for grades 4, 6, and 8. A significant, steady improvement is shown in grade 4; students in grade 6 demonstrated a slight growth; and no improvement was shown for grade 8 students.

A survey of 45 school districts was conducted to determine the degree of emphasis placed on 14 selected variables. The factor, total time spent on reading instruction, is not considered a significant variable with all districts reporting equal or more minutes per day across achievement levels. Comparing the emphasis placed on 13 educational practices between high and low achieving districts, 11 practices have a statistically significant difference.

Background

Reading scores in Mississippi have been below the national average since 1988. Students in grades 4 and 6 have shown consistent gains in reading on the Stanford Achievement Test from 1988 to 1994. Students in grade 8 have, within a few percentage points, remained the same. In an effort to enhance reading instruction the Mississippi State Board of Education directed the development of a report on reading.

Procedure

Questionnaire

To gather information for the study, a survey instrument was developed (Appendix A, page 60.) Questions were designed from information taken from the 1992 National Assessment of Educational Progress (NAEP), the National Reading Standards and accepted factors and practices.

The survey instrument was designed to solicit information on the following factors/ practices:

1. Time spent on reading instruction - two questions;
2. Emphasis placed on instructional strategies used in the classroom - nine questions;
3. Use of the library/media center as an extension of the reading program - one question;
4. Emphasis placed on the use of technology in teaching reading - two questions;
5. Emphasis placed on reading outside the school - one question;
6. Emphasis placed on the learning styles of students - one question.

Curriculum coordinators or their designee of 45 school districts were asked to respond to the survey instrument. An approximate 30 minute telephone conversation with the State Department of Education's Reading Specialist was conducted with each district. Districts chosen to participate in the survey were selected based on their reading scores in grades 4, 6 and 8 on the Norm-Referenced Assessment administered in October 1994. Results were tabulated and are depicted in graph form in the study.

Sample

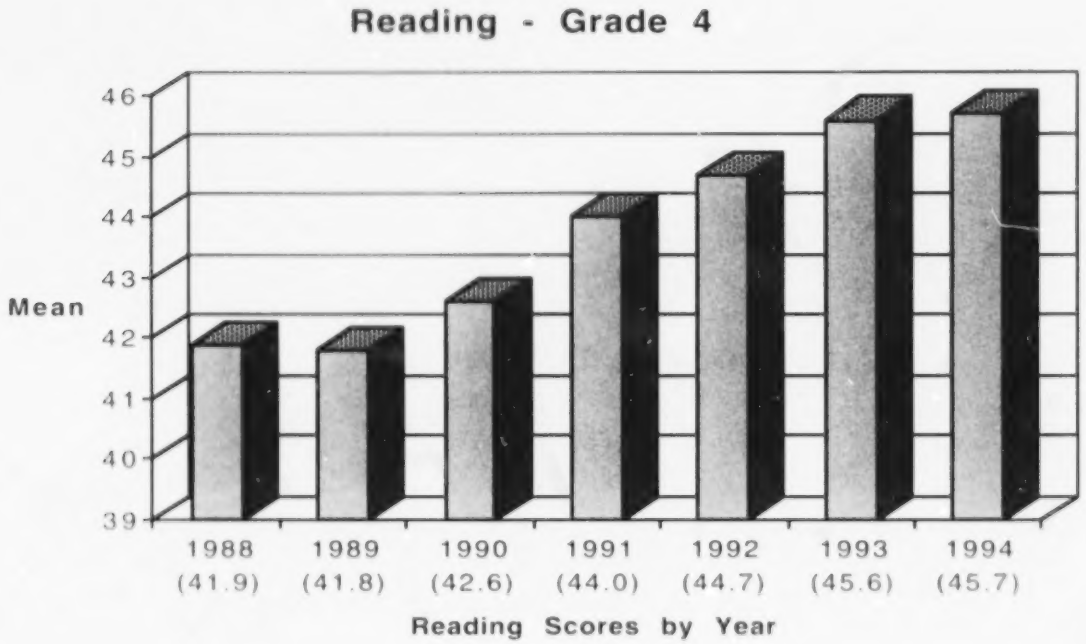
Districts were selected for the survey from data provided by the 1994 Norm-Referenced Assessment. A combination of scores of students in grades 4, 6 and 8 was used to place districts into three groups. Fifteen districts from those scoring lowest on the assessment, fifteen districts from those scoring in the mid-range and fifteen scoring in the highest range were included in the survey. Each selected district was telephoned, interviewed in a 30 minute conversation and responses from the curriculum coordinator or their designee were recorded. District responses were tallied and the results of the survey are shown in the graphs included in this report.

Analysis

The statistical analysis applied to information obtained from the survey was a Student's t-Test (two samples with equal variance, two tailed). An analysis was performed to determine if the difference between responses from high achieving districts and low achieving districts was statistically significant at the .05 level.

Test Data
Stanford Achievement Test
(SAT)
1988-1994

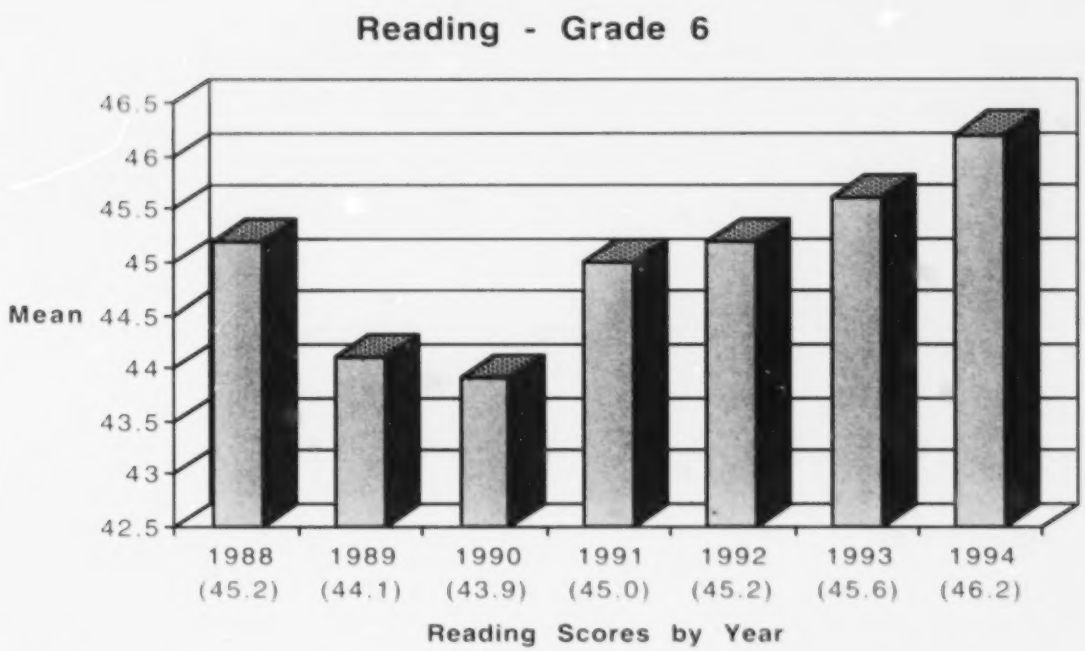
Stanford Achievement Test (SAT)



Graph Reflects: Reading scores for grade 4 students have shown a significant, steady increase from 1988-1994.

Source: Summary Report for 1994, Mississippi Statewide Testing Program.

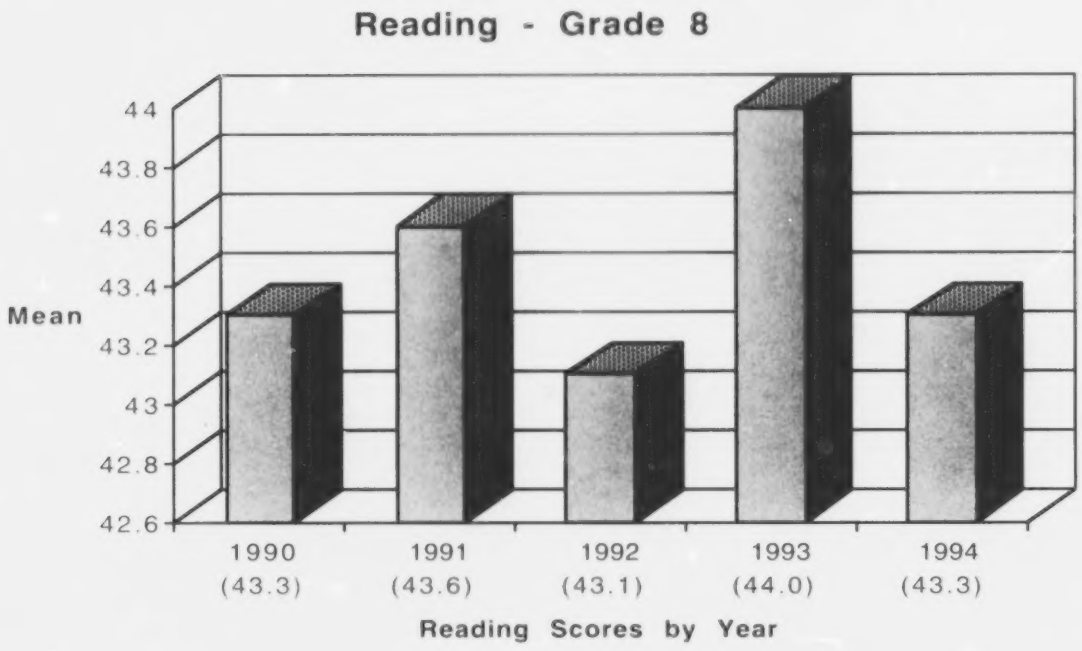
Stanford Achievement Test (SAT)



Graph reflects: Reading scores for grade 6 students have been erratic, yet show a slight increase from 1990-1994.

Source: Summary Report for 1994, Mississippi Statewide Testing Program.

Stanford Achievement Test (SAT)



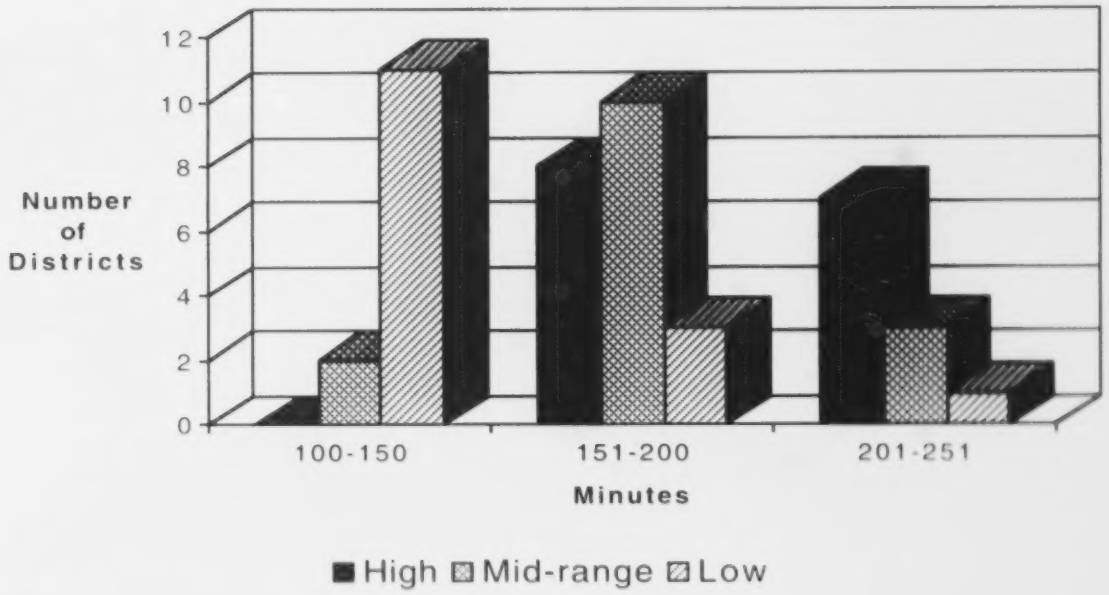
Graph Reflects: Reading scores for grade 8 students have fluctuated, but scores in 1994 are identical to those in 1990.

Source: Summary Report for 1994, Mississippi Statewide Testing Program.

Mississippi and National Assessment of Educational Progress (NAEP) Survey Results

Pre-Reading Instructional Minutes Per Day

Kindergarten



Source: Instructional Development Survey of 45 Districts. 15 selected from each range category (high, mid, low) of students' reading scores on the 1994 state norm-referenced assessment.

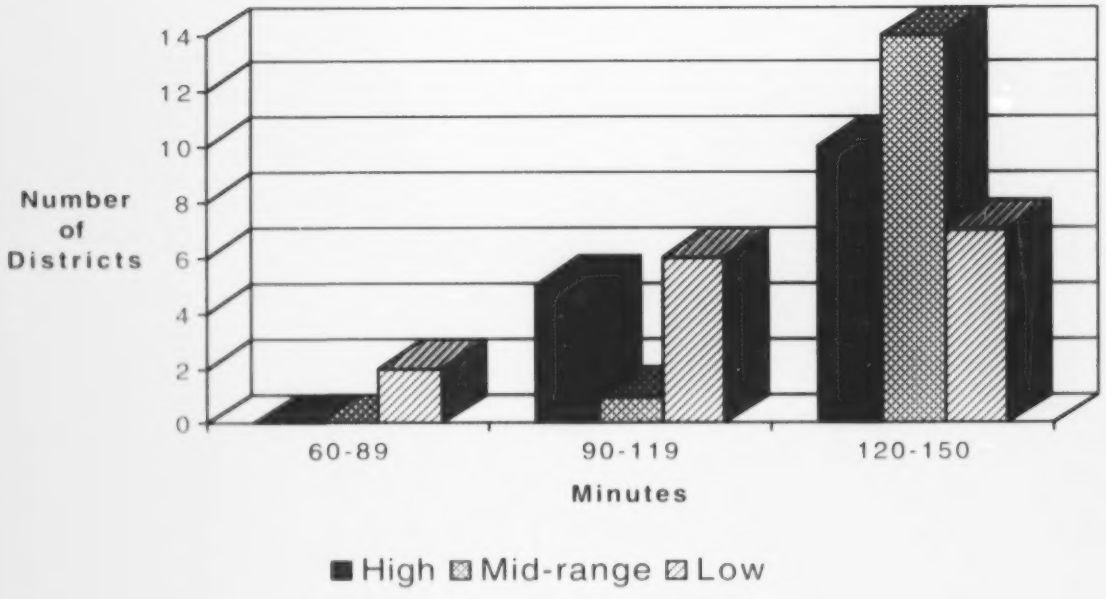
Mississippi Survey Question #1:

How much time (in minutes) is spent in pre-reading/reading instruction per day at each of the following levels: **kindergarten**; primary (grades 1-3); elementary (grades 4-6); and middle school (grades 7-8)?

Graph Reflects: In kindergarten, low achieving districts spend less time in pre-reading and reading instruction than do the mid-range and high performing districts.

Reading Instructional Minutes Per Day

Primary (Grades 1-3)



Source: Instructional Development Survey of 45 Districts. 15 selected from each range category (high, mid, low) of students' reading scores on the 1994 state norm-referenced assessment.

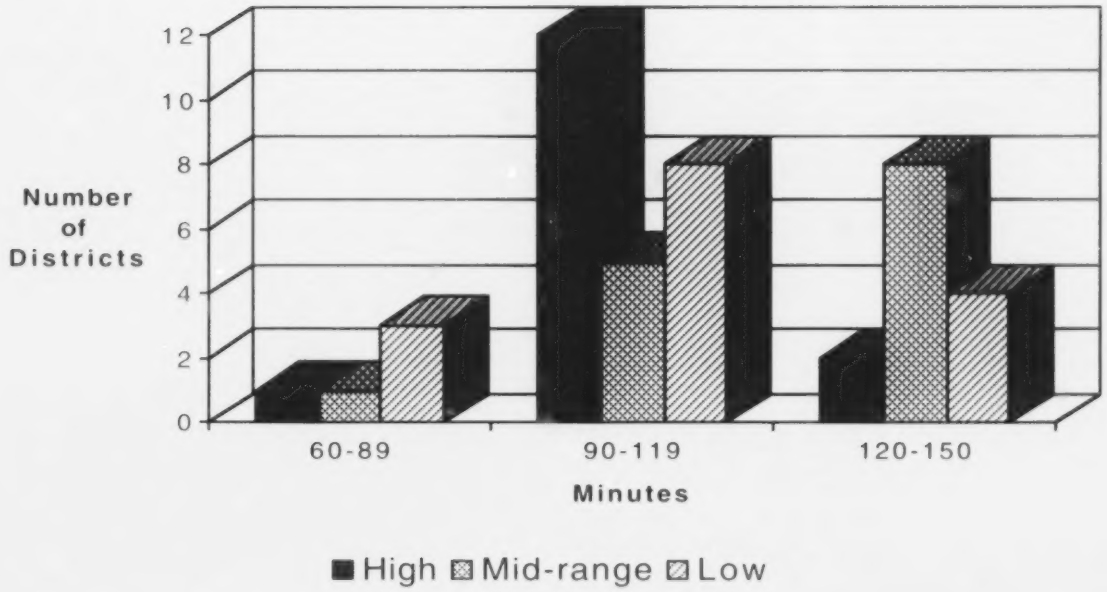
Mississippi Survey Question #1:

How much time (in minutes) is spent in reading instruction per day at each of the following levels: kindergarten; **primary (grades 1-3)**; elementary (grades 4-6); and middle school (grades 7-8)?

Graph Reflects: Most districts allocate 120-150 minutes in grades 1-3; no significant difference between groups.

Reading Instructional Minutes Per Day

Elementary (Grades 4-6)



Source: Instructional Development Survey of 45 Districts. 15 selected from each range category (high, mid, low) of students' reading scores on the 1994 state norm-referenced assessment.

Mississippi Survey Question #1:

How much time (in minutes) is spent in reading instruction per day at each of the following levels: kindergarten; primary (grades 1-3); **elementary (grades 4-6);** and middle school (grades 7-8)?

Graph Reflects: Most districts allocate 90-150 minutes in grades 4-6; no significant differences between groups.

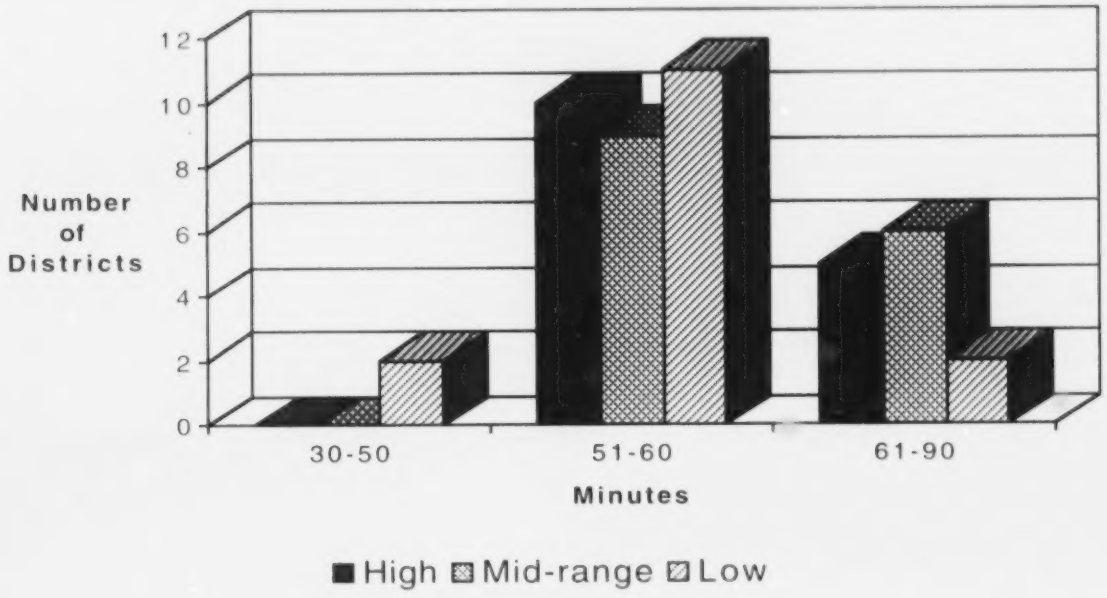
	National Assessment of Educational Progress*		
	30-45 minutes	**60 minutes**	**90 minutes or more**
Nation	29% of students	52% of students	19% of students
Southeast	32% of students	47% of students	20% of students
Mississippi	10% of students	20% of students	70% of students

NAEP Results: Seventy percent of Mississippi students spend 90 minutes or more in reading instruction.

**This data is from National Assessment of Educational Progress (NAEP), 1992 Reading Assessment - Grade 4.*

Reading Instructional Minutes Per Day

Middle School (Grades 7-8)

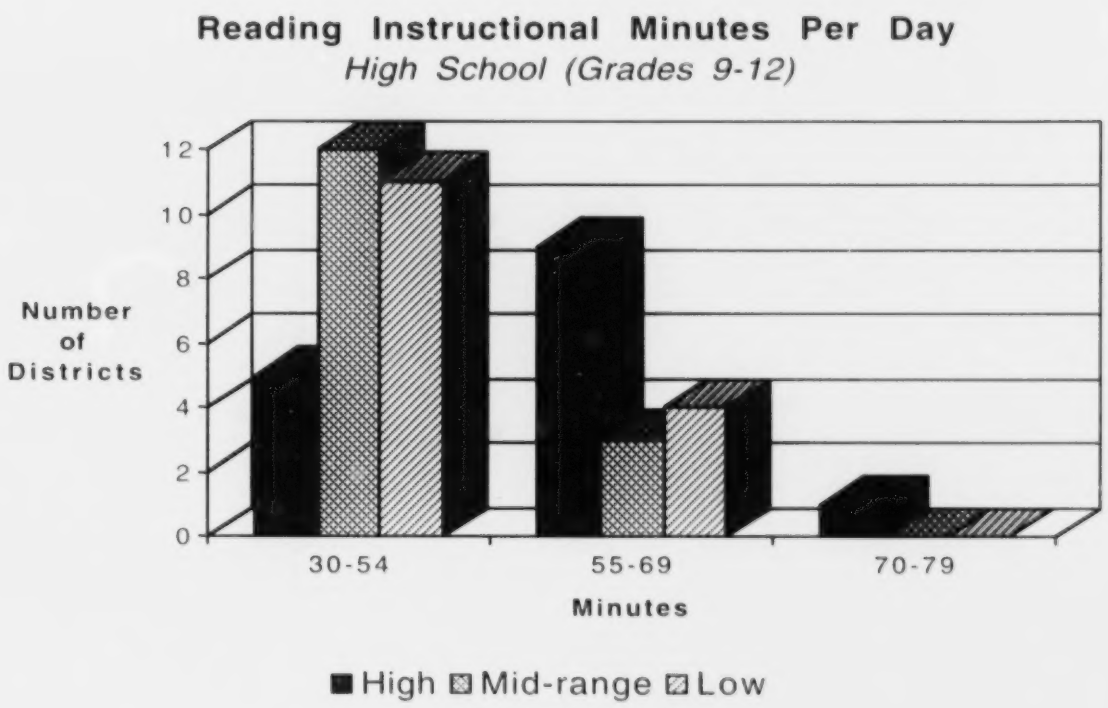


Source: Instructional Development Survey of 45 Districts. 15 selected from each range category (high, mid, low) of students' reading scores on the 1994 state norm-referenced assessment.

Mississippi Survey Question #1:

How much time (in minutes) is spent in reading instruction per day at each of the following levels: kindergarten; primary (grades 1-3); elementary (grades 4-6); and **middle school (grades 7-8)**?

Graph Reflects: Most districts allocate a 50-60 minute class period for grades 7-8; no significant difference between groups.



Source: Instructional Development Survey of 45 Districts. 15 selected from each range category (high, mid, low) of students' reading scores on the 1994 state norm-referenced assessment.

Mississippi Survey Question #2:

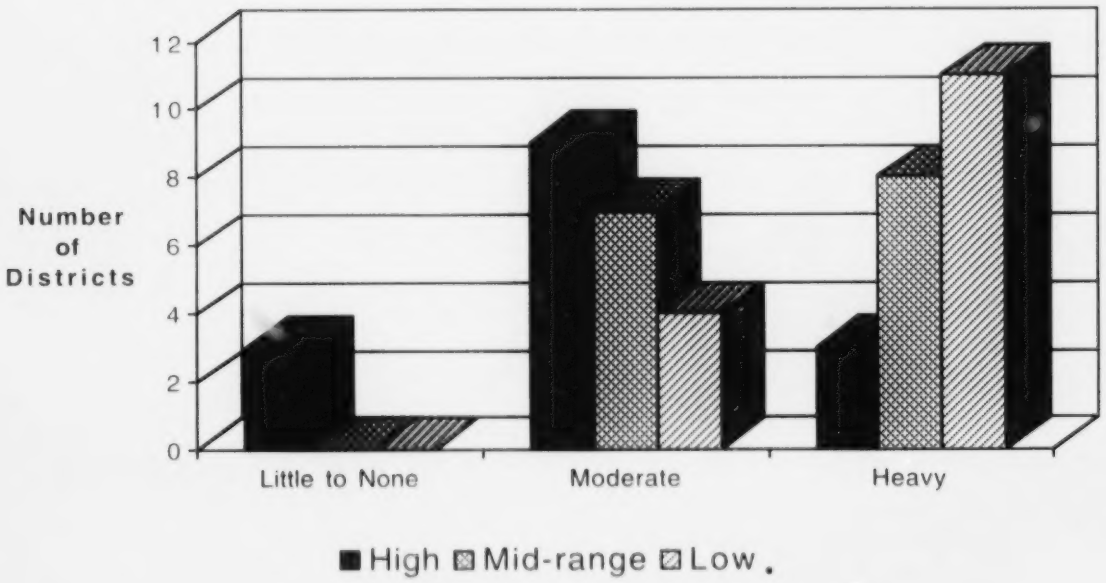
How much time (in minutes) is spent in literature studies per day at grades 9-12?

Graph Reflects: Most districts allocate a 50-60 minute class period for one semester at the high school level (grades 9-12); no significant difference between groups.

NOTE: Literature studies and grammar are integrated in the district English curriculum.

Emphasis Given to Basal Reading Textbook

Grades K-8



Source: Instructional Development Survey of 45 Districts. 15 selected from each range category (high, mid, low) of students' reading scores on the 1994 state norm-referenced assessment.

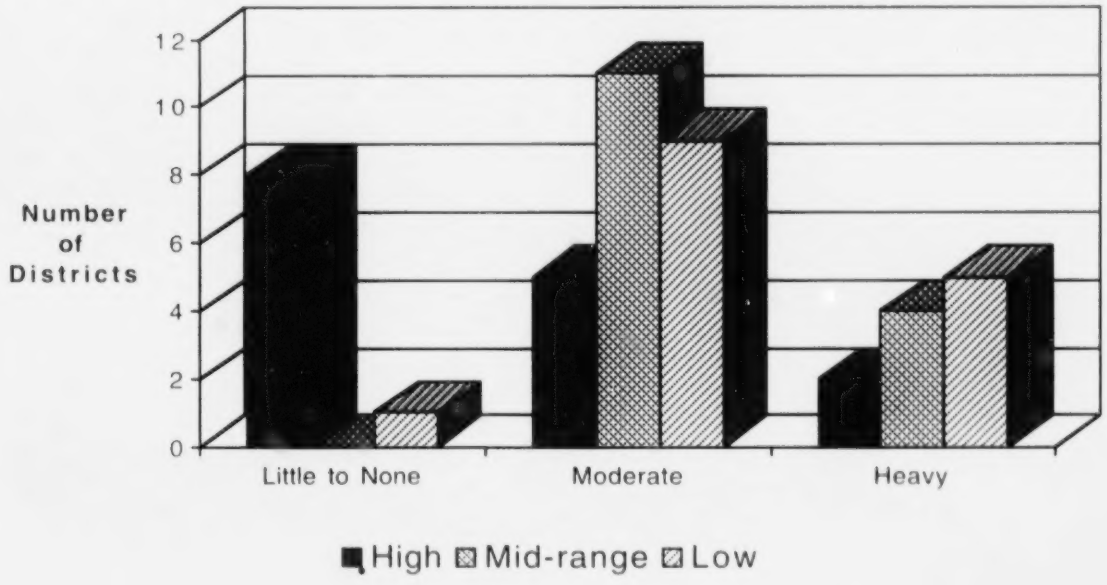
Mississippi Survey Question #3:

How much emphasis is given to basal reading textbooks?

Graph Reflects: Low and mid-range scoring districts report a moderate to heavy emphasis on use of basal texts in reading instruction.

Emphasis Given to Workbooks/Ditto Sheets

Grades K-12



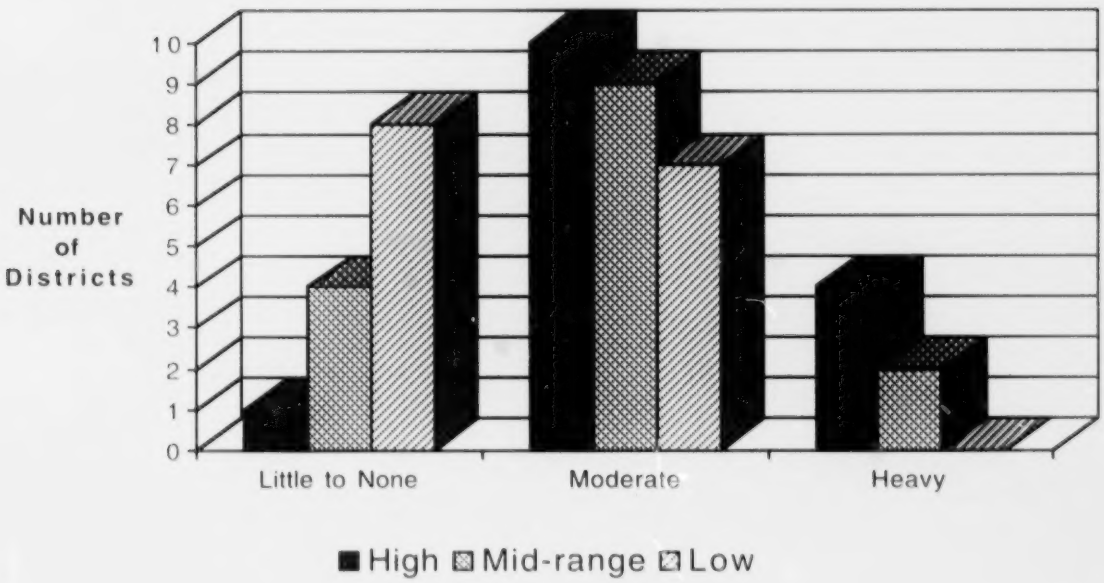
Source: Instructional Development Survey of 45 Districts. 15 selected from each range category (high, mid, low) of students' reading scores on the 1994 state norm-referenced assessment.

Mississippi Survey Question #4:

How much emphasis is given to workbooks/ditto sheets?

Graph Reflects: High achieving districts report lesser use of workbooks and ditto sheets than do mid-range and low achieving districts.

Emphasis Given to Trade Books
Grades K-12



Source: Instructional Development Survey of 45 Districts. 15 selected from each range category (high, mid, low) of students' reading scores on the 1994 state norm-referenced assessment.

Mississippi Survey Question #5:

How much emphasis is given to the use of trade books in reading instruction?

Graph Reflects: High achieving districts report a heavier emphasis on the use of trade books than do the low achieving districts.

National Assessment of Educational Progress*

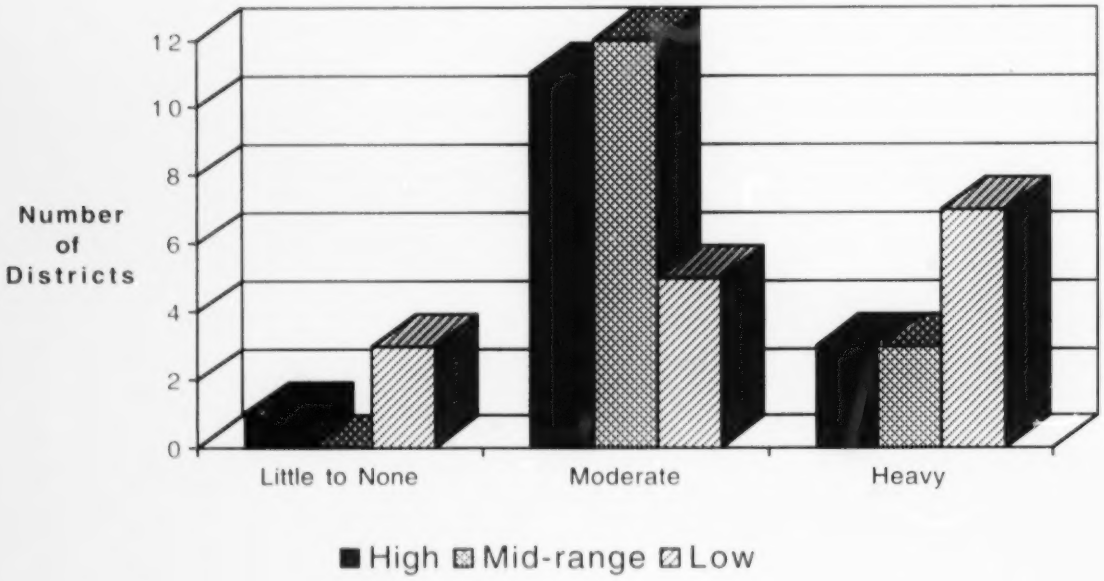
	Primary Basal	Primarily Trade	Basal and Trade	Other
Nation	33	13	51	3
Southeast	45	7	44	5
Mississippi	51	1	46	1

NAEP Results: Fifty-one percent of Mississippi grade 4 students use the basal reading textbook. Forty-six percent of Mississippi grade 4 students use both basal and trade books.

**This data is from National Assessment of Educational Progress (NAEP), 1992 Reading Assessment - Grade 4.*

Emphasis Placed on Phonics Instruction

Grades K-8



Source: Instructional Development Survey of 45 Districts. 15 selected from each range category (high, mid, low) of students' reading scores on the 1994 state norm-referenced assessment.

Mississippi Survey Question #6:

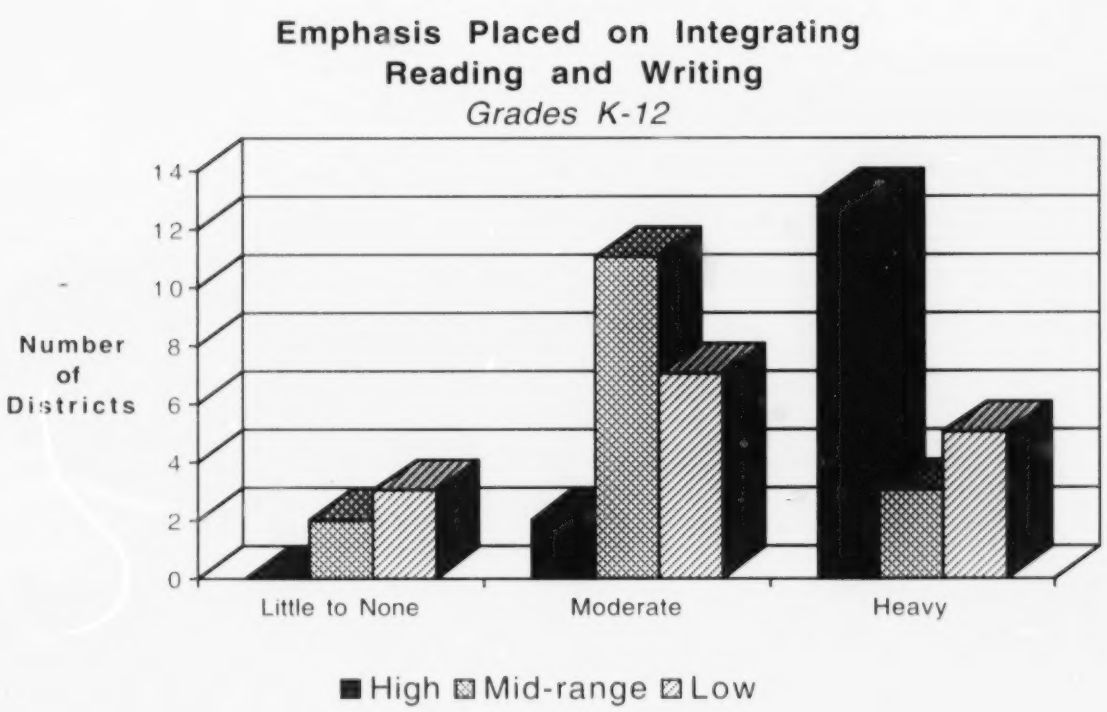
How much emphasis is placed on phonics instruction?

Graph Reflects: No statistical significant difference is reported between groups in the emphasis placed on phonics instruction.

	National Assessment of Educational Progress*		
	Little to None	**Moderate**	**Heavy**
Nation	40% of students	48% of students	11% of students
Southeast	33% of students	53% of students	14% of students
Mississippi	13% of students	65% of students	22% of students

NAEP Results: Compared to grade 4 students in the Southeast and nation, Mississippi students receive a heavier emphasis in phonics instruction.

**This data is from National Assessment of Educational Progress (NAEP), 1992 Reading Assessment - Grade 4.*



Source: Instructional Development Survey of 45 Districts. 15 selected from each range category (high, mid, low) of students' reading scores on the 1994 state norm-referenced assessment.

Mississippi Survey Question #7:

How much emphasis is placed on integrating reading and writing instruction?

Graph Reflects: High achieving districts report a much heavier emphasis on the integration of reading and writing than do the mid-range and low achieving districts.

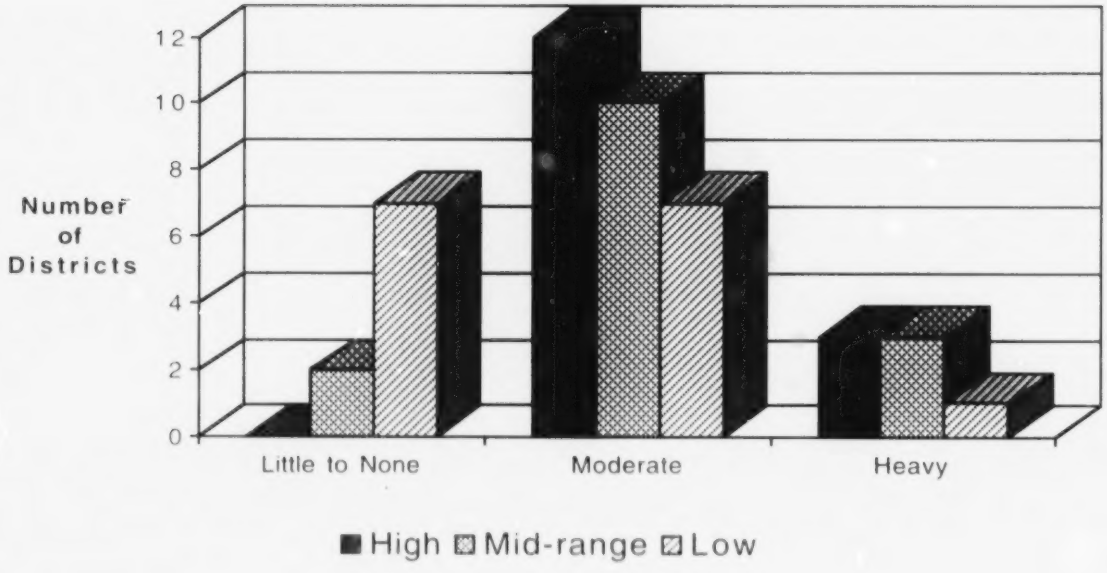
	National Assessment of Educational Progress*		
	Little to None	**Moderate**	**Heavy**
Nation	3% of students	42% of students	55% of students
Southeast	1% of students	50% of students	49% of students
Mississippi	6% of students	50% of students	44% of students

NAEP Results: Mississippi's grade 4 students do not receive as heavy an emphasis on the integration of reading and writing as their counterparts across the nation.

**This data is from National Assessment of Educational Progress (NAEP), 1992 Reading Assessment - Grade 4.*

Emphasis Placed on Prior Knowledge in Writing Instruction

Grades K-12



Source: Instructional Development Survey of 45 Districts. 15 selected from each range category (high, mid, low) of students' reading scores on the 1994 state norm-referenced assessment.

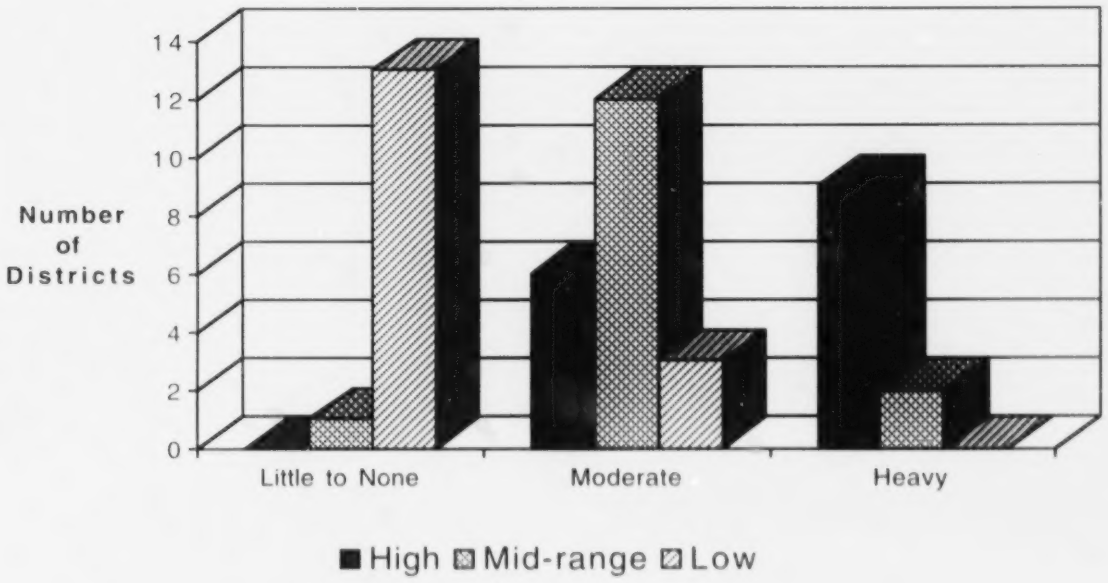
Mississippi Survey Question #8:

How much emphasis is placed on prior knowledge in writing instruction?

Graph Reflects: High achieving districts report a heavier emphasis on prior knowledge in writing instruction than do low achieving districts.

Emphasis Placed on Literature-Based Instruction

Grades K-12



Source: Instructional Development Survey of 45 Districts. 15 selected from each range category (high, mid, low) of students' reading scores on the 1994 state norm-referenced assessment.

Mississippi Survey Question #9:

How much emphasis is placed on literature-based instruction?

Graph reflects: High achieving districts report a much heavier emphasis on literature-based instruction than do low achieving districts.

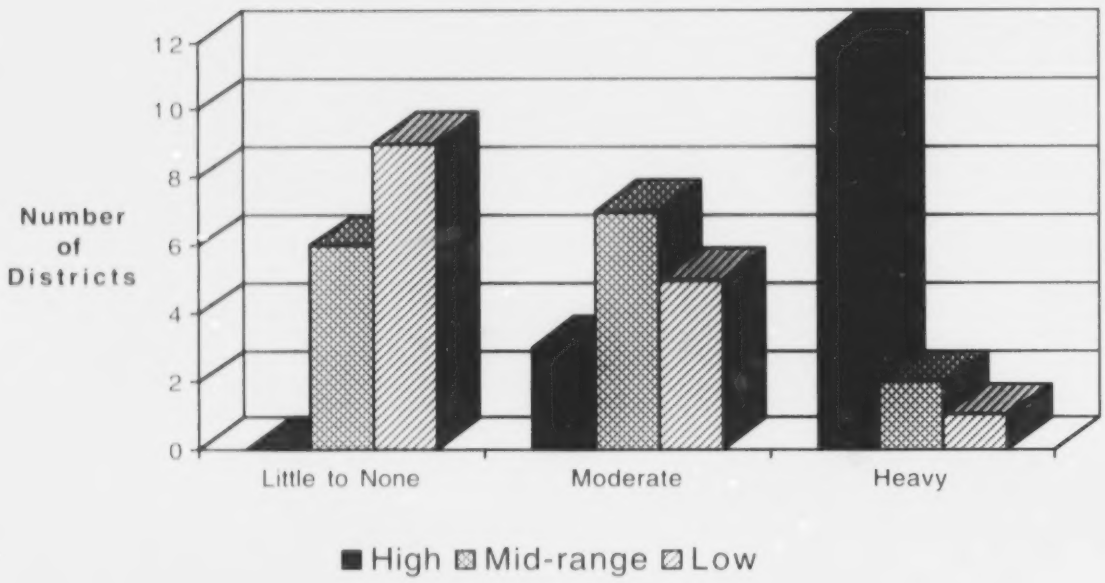
	National Assessment of Educational Progress*		
	Little to None	**Moderate**	**Heavy**
Nation	11% of students	38% of students	50% of students
Southeast	18% of students	39% of students	43% of students
Mississippi	12% of students	60% of students	28% of students

NAEP Results: Twenty-eight percent of Mississippi's grade 4 students receive heavy emphasis on literature-based instruction compared to 50 percent of those reported nationally.

**This data is from National Assessment of Educational Progress (NAEP), 1992 Reading Assessment - Grade 4.*

Emphasis Placed on Learning Styles of Students

Grades K-12

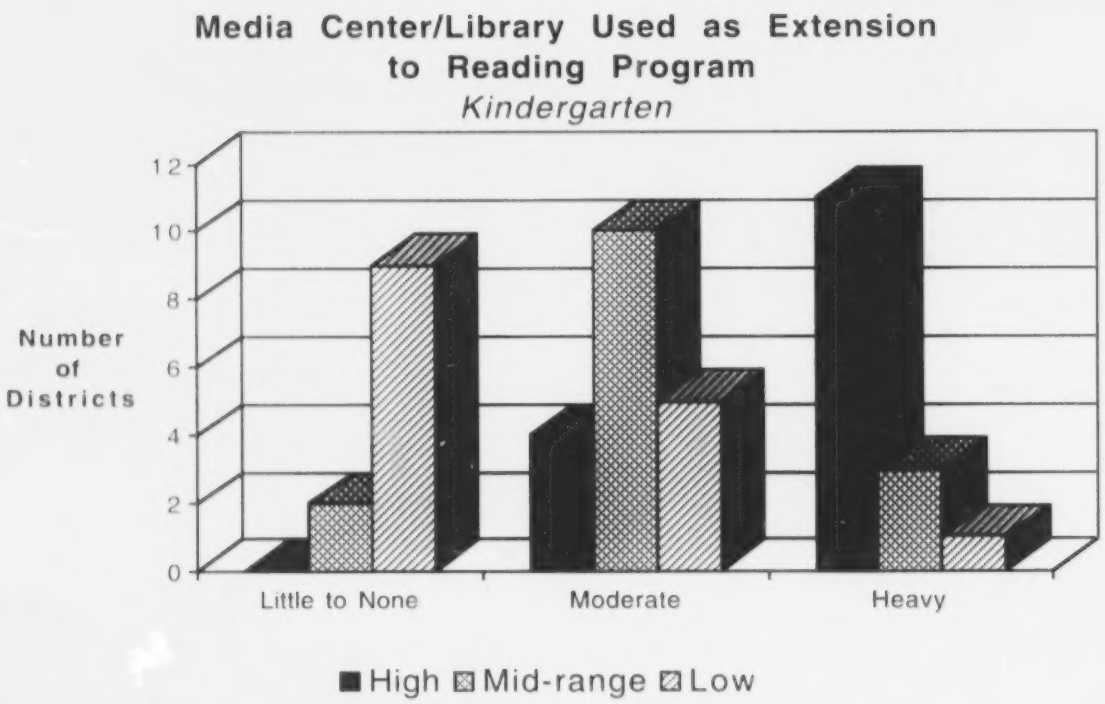


Source: Instructional Development Survey of 45 Districts. 15 selected from each range category (high, mid, low) of students' reading scores on the 1994 state norm-referenced assessment.

Mississippi Survey Question #10:

How much emphasis is placed on learning styles of students?

Graph Reflects: High achieving districts report a heavier emphasis placed on the learning styles of students than do the mid-range and low achieving districts.



Source: Instructional Development Survey of 45 Districts. 15 selected from each range category (high, mid, low) of students' reading scores on the 1994 state norm-referenced assessment.

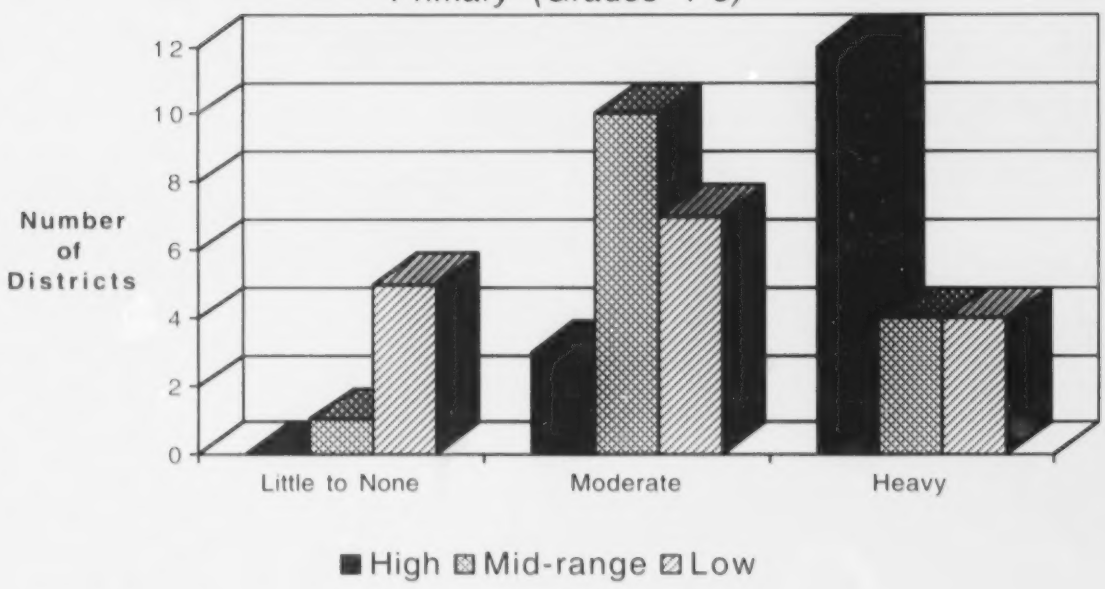
Mississippi Survey Question #11:

Is your library used as an extension of the reading program: **kindergarten (pre-reading/reading);** primary (grades 1-3); elementary (grades 4-6); middle school (grades 7-8); and high school (grades 9-12)?

Graph Reflects: In kindergarten, the high and mid-range achieving districts report a greater use of the media center/library as an extension to the reading program than do low achieving districts.

Media Center/Library Used as Extension to Reading Program

Primary (Grades 1-3)



Source: Instructional Development Survey of 45 Districts. 15 selected from each range category (high, mid, low) of students' reading scores on the 1994 state norm-referenced assessment.

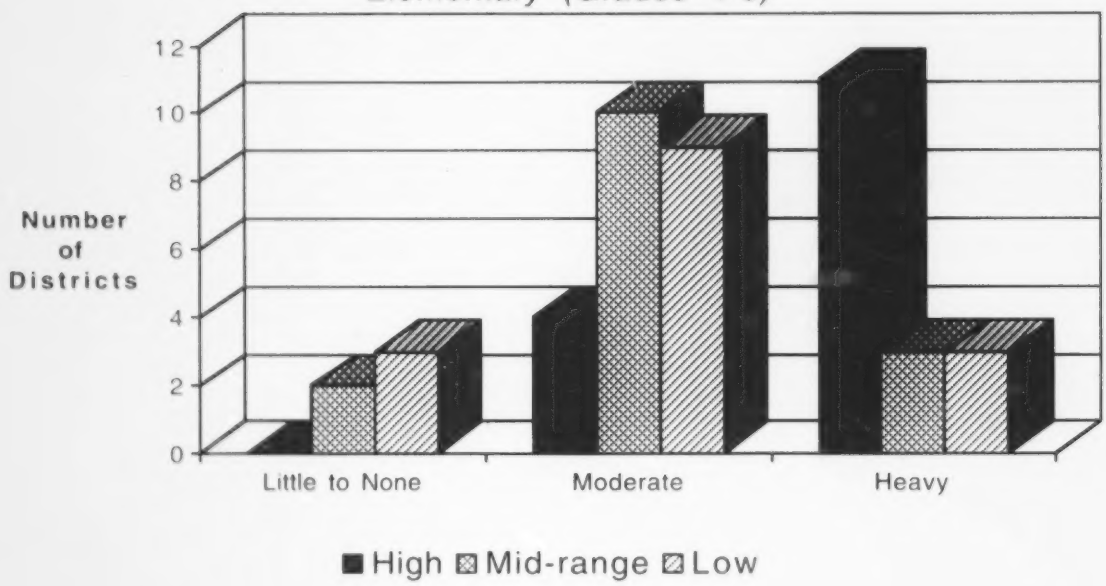
Mississippi Survey Question #11:

Is your library used as an extension of the reading program: kindergarten (pre-reading/reading); **primary (grades 1-3);** elementary (grades 4-6); middle school (grades 7-8); and high school (grades 9-12)?

Graph Reflects: In grades 1-3, the high and mid-range achieving districts report a greater use of the media center/library as an extension to the reading program than do low achieving districts.

Media Center/Library Used as Extension to Reading Program

Elementary (Grades 4-6)



Source: Instructional Development Survey of 45 Districts. 15 selected from each range category (high, mid, low) of students' reading scores on the 1994 state norm-referenced assessment.

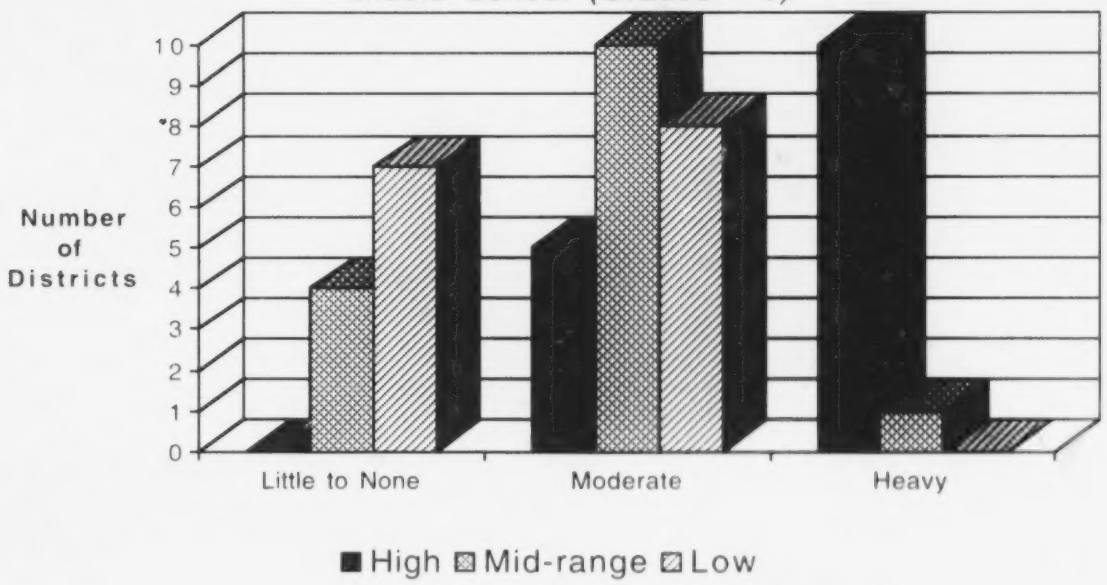
Mississippi Survey Question #11:

Is your library used as an extension of the reading program: kindergarten (pre-reading/reading); primary grades (1-3); **elementary (grades 4-6)**; middle school (grades 7-8); and high school (grades 9-12)?

Graph Reflects: In grades 4-6, the high achieving districts report a greater use of the media center/library as an extension to the reading program than do low achieving districts.

Media Center/Library Used as Extension to Reading Program

Middle School (Grades 7-8)

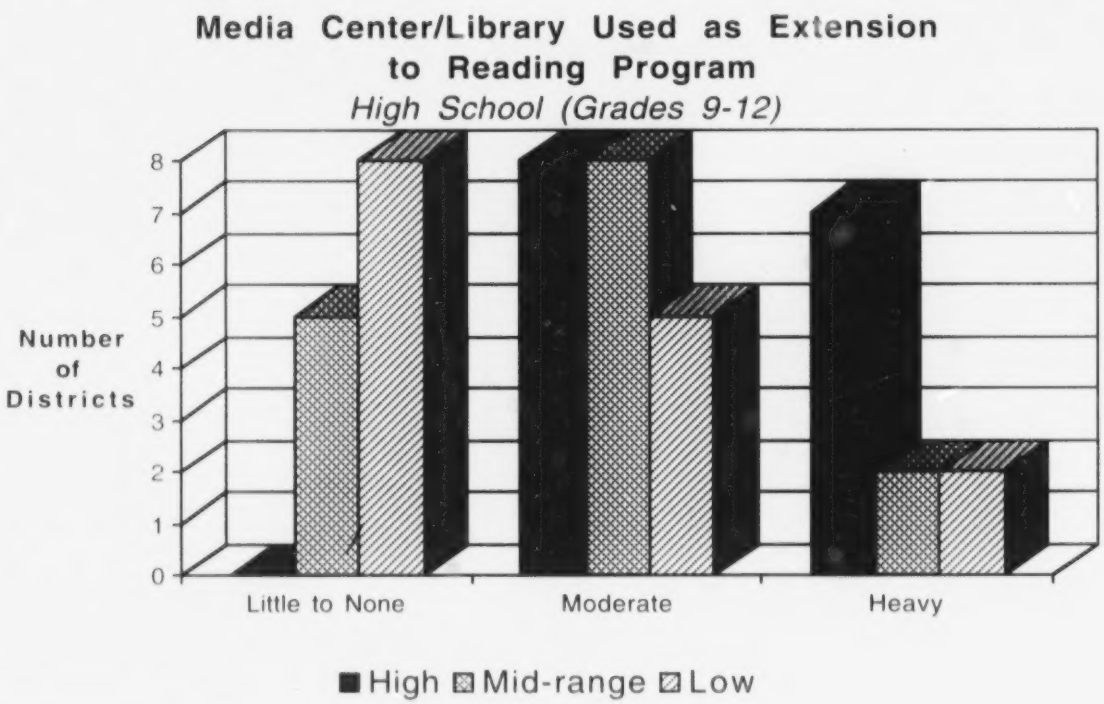


Source: Instructional Development Survey of 45 Districts. 15 selected from each range category (high, mid, low) of students' reading scores on the 1994 state norm-referenced assessment.

Mississippi Survey Question #11:

Is your library used as an extension of the reading program: kindergarten (pre-reading/reading); primary (grades 1-3); elementary (grades 4-6); **middle school (grades 7-8)** and high school (grades 9-12)?

Graph Reflects: In grades 7-8, the high achieving districts report a greater use of the media center/library as an extension to the reading program than do low achieving districts.



Source: Instructional Development Survey of 45 Districts. 15 selected from each range category (high, mid, low) of students' reading scores on the 1994 state norm-referenced assessment.

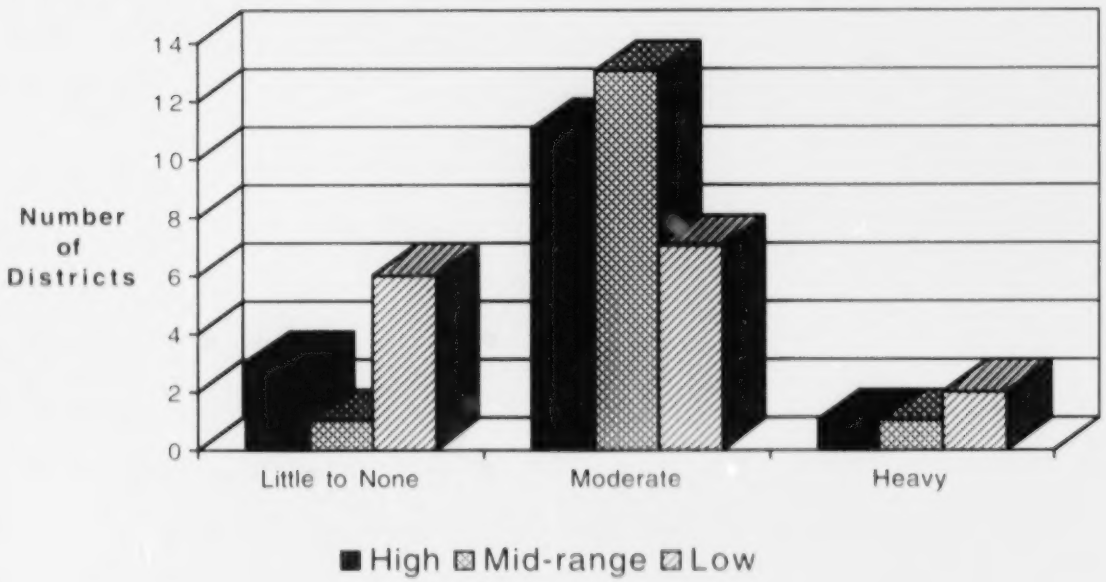
Mississippi Survey Question #11:

Is your library used as an extension of the reading program: kindergarten (pre-reading/reading); primary (grades 1-3); elementary (grades 4-6); middle school (grades 7-8); **and high school (grades 9-12)**?

Graph Reflects: In grades 9-12, the high achieving districts report a greater use of the media center/library as an extension to the reading program than do low achieving districts.

Emphasis Placed on Reading Technology

Grades K-12



Source: Instructional Development Survey in 45 Districts. 15 selected from each range category (high, mid, low) of students' reading scores on the 1994 state norm-referenced assessment.

Mississippi Survey Questions #12 and #13:

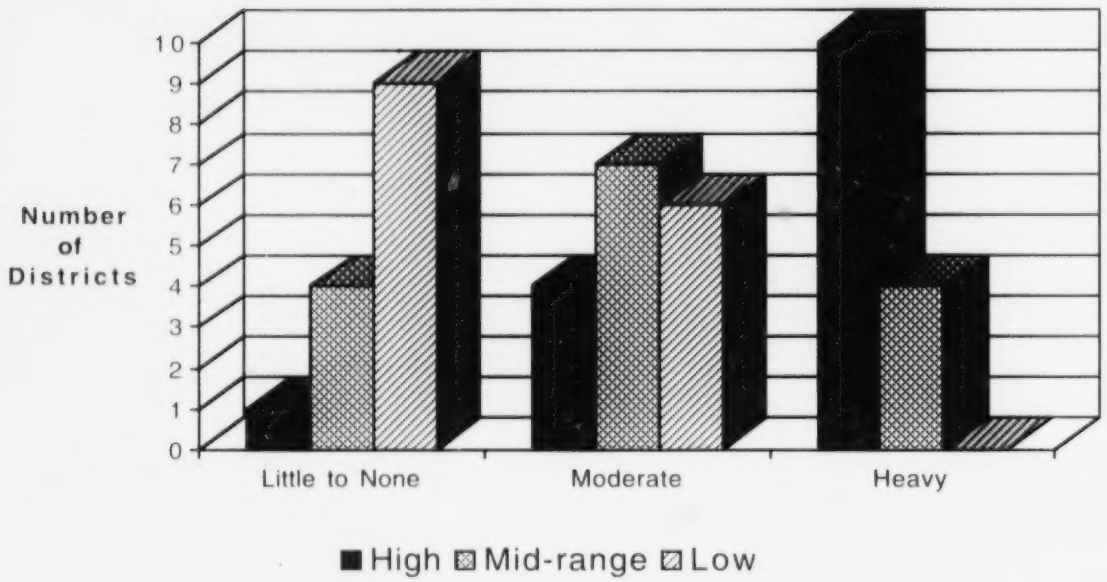
How much emphasis is placed on reading technology?

How much emphasis is placed on technology communication? (Are programs more than computerized ditto sheets?)

Graph Reflects: No significant difference between groups on the emphasis placed on reading technology.

Emphasis Placed on Thematic Units

Grades K-12

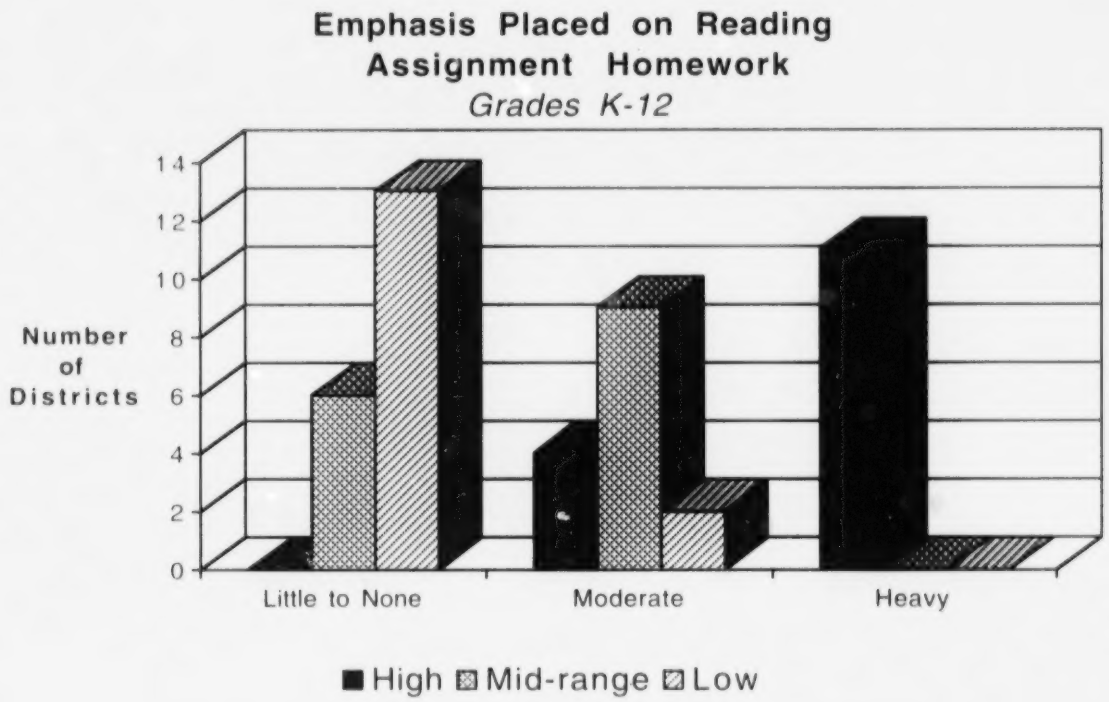


Source: Instructional Development Survey of 45 Districts. 15 selected from each range category (high, mid, low) of students' reading scores on the 1994 state norm-referenced assessment.

Mississippi Survey Question #14:

How much emphasis is placed on thematic units?

Graph Reflects: High achieving districts report a heavier emphasis on thematic units than do low achieving districts.



Source: Instructional Development Survey of 45 Districts. 15 selected from each range category (high, mid, low) of students' reading scores on the 1994 state norm-referenced assessment.

Mississippi Survey Question #15:

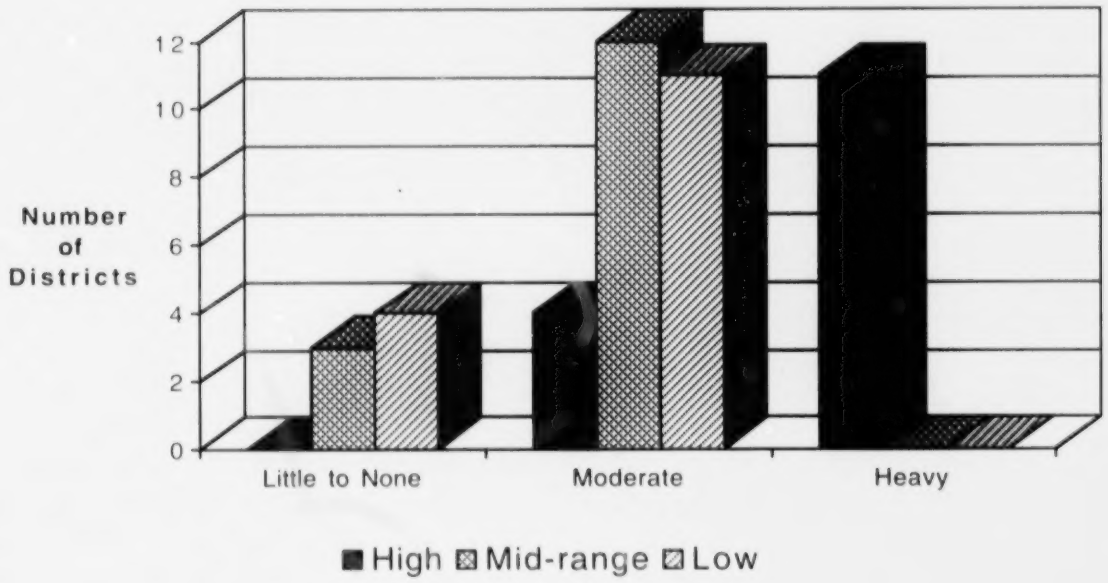
How much emphasis and follow through is placed on "real reading" (books, magazines, newspapers) in homework assignments?

Graph Reflects: High achieving districts report a much heavier emphasis on reading assignments for homework than mid-range and low achieving districts.

NOTE: Question developed because of Goodlad's research. Goodlad's research states students read four minutes for every one and one-half hours of television they watch away from school.

Emphasis Placed on Free Choice Reading

Grades K-12



Source: Instructional Development Survey of 45 Districts. 15 selected from each range category (high, mid, low) of students' reading scores on the 1994 state norm-referenced assessment.

Mississippi Survey Question #16:

How much emphasis is placed on time for "real reading" (books, magazines, newspapers) per day in the classroom?

Graph Reflects: High achieving districts report a much heavier emphasis on free choice reading than do mid-range and low achieving districts.

Results

The responses to the questions on the survey are a reflection of the reading programs in the schools in Mississippi. The results of each question are reflected in graphs to give an overview of where school districts view themselves in reading instruction and other educational factors. According to a statistical study performed by the staff of the Mississippi Department of Education the results are statistically significant on 11 of 13 variables.

Each graph is accompanied by a brief reflection of the data. When like questions were used on the NAEP questionnaire, the results have been supplied for the nation, Southeast and Mississippi. A brief reflection of NAEP data is also presented.

Findings

1. Mississippi students in grades 4 and 6 have made consistent gains in reading test scores since 1988 on the Stanford Achievement Test. The scores of students in grade 8 have, within a few percentage points, remained the same. (See tables on pages 8-10.)
2. Mississippi students spend equal or more time in reading instruction per day than their counterparts in the Southeast and nation. (See table on page 14.)
3. More than one instructional strategy is used in districts with higher test scores. (See tables on pages 17-33.)
4. More emphasis is placed on the integration of reading and writing in districts with higher test scores. (See table on page 21.)
5. Low scoring districts report a heavy emphasis on basal readers, workbooks and ditto sheets as instructional strategies. (See tables on page 17 and 18.)
6. Moderate to heavy extension of the media center/library to the reading program is reported by higher scoring districts. (See tables on pages 25-29.)
7. Little to no reading homework occurred outside the school environment in lower scoring districts. (See table on page 32.)
8. Moderate to heavy emphasis is placed on learning styles of the students in districts scoring higher. (See table on page 24.)
9. An integrated approach to reading utilizing multiple instructional practices and materials was apparent in high scoring districts.

Conclusion

The information gained from the sample districts cannot be used to provide a cause and effect conclusion of the best practices or materials in reading instruction. The number of variables that will influence data is not present in this report. The topic needs additional study if any definitive conclusion is to be reached.

Glossary of Terms

Basal Textbook Series - A collection of teacher-directed reading material that emphasizes basic skills with limited vocabulary.

Instructional strategies - Approaches, methods and processes through which student learning objectives are achieved.

Learning styles - The way a child receives and processes information. *Each youngster learns differently...and it is the match between how the learner learns and how the method teaches that determines who learns what—and how much.* Marie Carbo, Rita Dunn, Kenneth Dunn.

NCE - A standard score system having 99 equal intervals. The average corresponds to the 50th percentile; the first and 99th NCEs correspond to the first and 99th percentiles.

Prior knowledge - The knowledge a student has about a given subject before a lesson is introduced.

Reading technology - The use of computer programs that give practice in reading instruction.

Trade books - Student-centered reading materials with uncontrolled vocabulary that promotes critical understanding and problem solving.

Writing - A development process of communication in a written form.

Study Two

Predictors of Reading Achievement in High Poverty Schools

By the staff of the
Office of Academic Education, Compensatory Education
Jim Simmons, Ph.D., Research Analyst

Abstract

The Office of Compensatory Education conducted a survey with principals or other persons knowledgeable of the reading programs in 107 high poverty schools in Mississippi school districts. All these schools have Chapter 1 reading programs and a poverty index of at least 90 percent as determined by the number of enrolled students who participate in the free or reduced priced lunch program. The purpose of the study is to determine if certain variables are predictors of student achievement for schools with compensatory education reading programs. Results from this survey are correlated with Spring 1994 Stanford Achievement Test (SAT) scores for Total Reading.

Three factors are found to be highly significant predictors of reading achievement:

- The total hours per student spent on summer school instruction at each school,
- The amount of participation by reading teachers in staff development activities, and
- The percentage of children in the school enrolled in early intervention or reading readiness programs.

Three factors are found to be of probable importance but of marginal statistical significance:

- Total hours per student spent on supplementary reading instruction in the regular school year,
- The total number of formal reading programs at each school, and
- The percentage of parents regularly participating in the school's reading programs.

Background

The Office of Compensatory Education began in the past year a series of studies designed to uncover variables impacting the success of Chapter 1 programs in Mississippi. In the first of these studies, it is found that performance in these programs is closely correlated with overall school performance. This relationship is enhanced in the case of schoolwide programs, which are likely to increase numerically in Mississippi under the recently enacted Improving America's Schools Act of 1994.

Consequently, the Office of Compensatory Education has focused at least initially on factors important in predicting overall school success in schools having Chapter 1 reading programs. In the current study, results are reported on a survey of factors describing the reading program in high poverty Chapter 1 schools. These schools are defined as those with at least 90 percent of the enrollment participating in the National School Lunch Program. Although the overall average of reading achievement scores in these schools is considerably less than the state average for all Chapter 1 reading programs, there are many schools in this category which manage to equal or exceed the state average despite their demographics. This study seeks to find any distinguishing characteristics in these schools, that is, what variables can be measured in high poverty schools that predict success in reading achievement as measured by the Mississippi Assessment System.

Procedure

Questionnaire

Since this is an initial effort in a long term tracking of these programs, it was decided to cast as wide a net as possible with the expectation of more detailed follow-up of promising data and development of the most promising measures. A telephone survey of principals[1] was conducted in the sample of schools regarding the history and parameters of the reading program.

To develop this questionnaire (Appendix B, page 62), staff in the Office of Compensatory Education compiled a list of variables which effective schools research[2] and staff experience in Chapter 1 program improvement suggested might be important in predicting reading achievement. Eliminated from the list were variables that seemed obviously difficult to measure in a survey of this kind, such as the school environment or the leadership style of the principal. Questions were targeted at each of the thirteen variables remaining. Finally, added to the Chapter 1 survey was a series of questions developed by the Office of Instructional Development. These questions were designed to assess instructional strategies in the classroom, such as emphasis on integrating reading and writing (Question 14, Appendix B).

[1] In a few cases (less than 10%) the principal was not available. In those the lead reading teacher or other person knowledgeable of the reading program in the school was questioned.

[2] Effective Compensatory Education Sourcebook. Washington, D.C.: USDE Publication, 1992.

The final questionnaire was designed to assess the following:

1. Individuation of instruction based on the assessed strengths, weaknesses and needs of individual students;
2. The amount by which the quantity of reading instruction given per student in the regular school year exceeds state minimums, that is, the amount of additional instruction in reading given per student;
3. The amount of additional instruction given in summer school (as in item 2);
4. Coordination between regular and computer-assisted instruction (CAI) teachers;
5. Volunteers assisting in the reading program;
6. Parental involvement in the reading program;
7. Early intervention and reading readiness enrollment;
8. Participation in systemic reform initiatives such as Onward to Excellence or Chapter 1 schoolwide programs;
9. Participation in innovative reading enhancement initiatives, such as *HOTS (Higher Order Thinking Skills)* or *Writing to Read*;
10. Amount of silent, sustained reading time;
11. Professional development activities for reading teachers, including participation in professional reading organization meetings;
12. Teacher/pupil ratio in reading classes;
13. Programs such as contests that encourage reading for enjoyment; and
14. Classroom instructional strategies.

It is noted that some of these measures place more premium than others on the principal's ability to make estimations.

Sample

In the initial study were listed 130 schools with Chapter 1 reading programs and a poverty rate of 90 percent or higher. Eliminated from this sample were 14 schools in which less than half the school's grades were grade 6 or below.[3] This decision allowed for a standardization of the survey on schools with a regular program of reading instruction. Of the 116 remaining, completed survey responses could not be obtained for nine of them. Therefore, the final sample size is 107 schools.

[3] These were all high schools or junior high schools.

Analysis

Data were analyzed using Pearson Correlation (Pearson's r) and multiple regression techniques in addition to normal descriptive statistics. All tests of statistical significance refer to these measures.

The independent (predictor) variables are the questionnaire responses; the dependent (outcome) variable in each case is the school's Spring 1994 SAT score in Total Reading using Normal Curve Equivalents (NCE), averaged for grades 4, 6 and 8. This means that both independent and dependent measures are by necessity imprecise. The former are estimates taken from a first questionnaire that will need to be refined for clarity in future versions; the latter may represent SAT scores from only a minority of the students at a given school (as in the case of a K-5 school).

Stated differently, there is likely a good deal of unbiased error variation in the estimates. It is possible that the relationships reported in the results may be underestimates of the true relationships among these variables which may be demonstrably enhanced as the precision of the measures increases.

Results

Achievement Quintiles

To convey results in a more understandable manner, results are charted by quintile level.[4] Schools in the sample are ranked by 1994 SAT reading scores and divided into five equal groups:

First Quintile (21 schools, average NCE = 45.5),
Second Quintile (22 schools, average NCE = 39.4),
Third Quintile (21 schools, average NCE = 37.1),
Fourth Quintile (22 schools, average NCE = 35.1), and
Fifth Quintile (21 schools, average NCE = 31.7).

[4] All statistical tests were done on the sample of 107 individual schools.

The state average reading NCE for Chapter 1 schools is 43.9 with a standard deviation of 7; most First and Second Quintile schools therefore either exceed or come within normal bounds of an average state Chapter 1 school. Third, Fourth and Fifth Quintile schools do not.

Tier 1 Variables

Three variables are found to be highly significant statistically[5] and of approximately equal importance as predictors of reading achievement in high poverty schools.

Figure 1 shows total hours of **summer school instruction** for each child enrolled in the school by school quintile (simple averages). There is a dramatic and consistent increase in the proportion of time reported for summer school instruction (Question 3, Appendix B) as reading scores increase, with schools in the First Quintile for achievement level averaging more than nine times the total hours of schools in the Fifth Quintile.

It is also apparent that, to the extent that summer school instruction is a causal factor,[6] these results may be achieved with a relatively modest average investment of resources; among the eleven First Quintile schools operating summer programs, the average reading instruction per child was only 14.8 total hours. Any effect that this instruction has on reading scores may therefore be as much a result of <u>when</u> it takes place (between regular school years) as a result of the quantity of instruction.

This interpretation is consistent with a wide range of findings in psychological learning research that "spaced" training is generally superior to "massed" training for most learning tasks. It is also consistent with the common observation among education professionals that children seem to forget a great deal over summer vacation, so that much of the initial time in each school year is spent reclaiming knowledge possessed at the end of the previous year.

If this interpretation is correct, it is possible there may be an enhanced effect for summer school instruction now that the state has initiated a fall semester testing schedule. In any case, it may well be that summer school instruction represents an underutilized resource for many Mississippi schools.

[5] Pearson's r = .33 to .35, $p < .001$.

[6] (And is not a reflection of some unknown common correlate.)

Figure 1

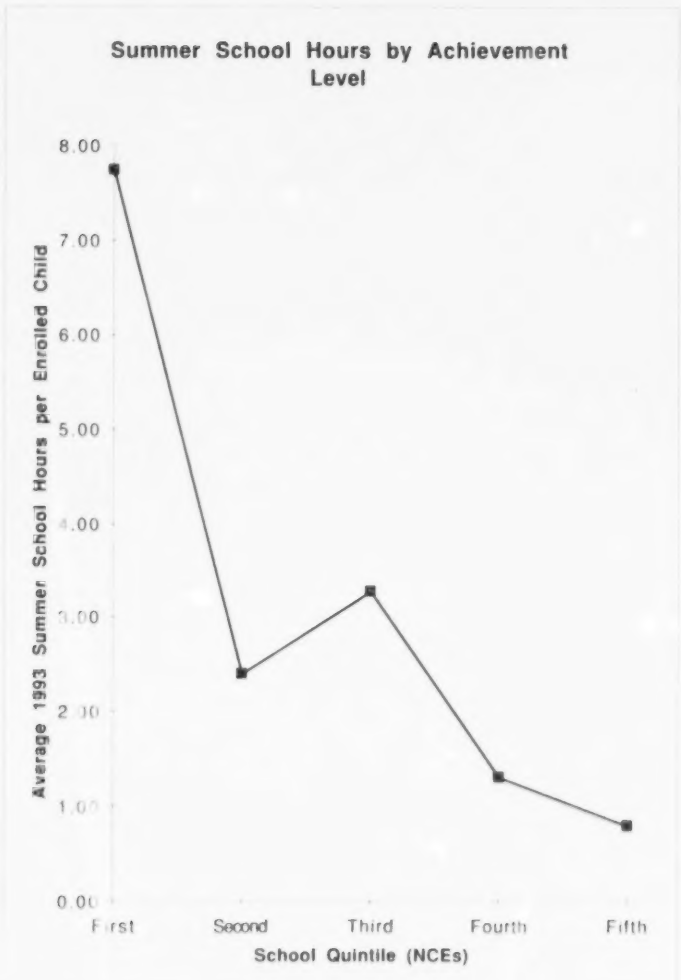
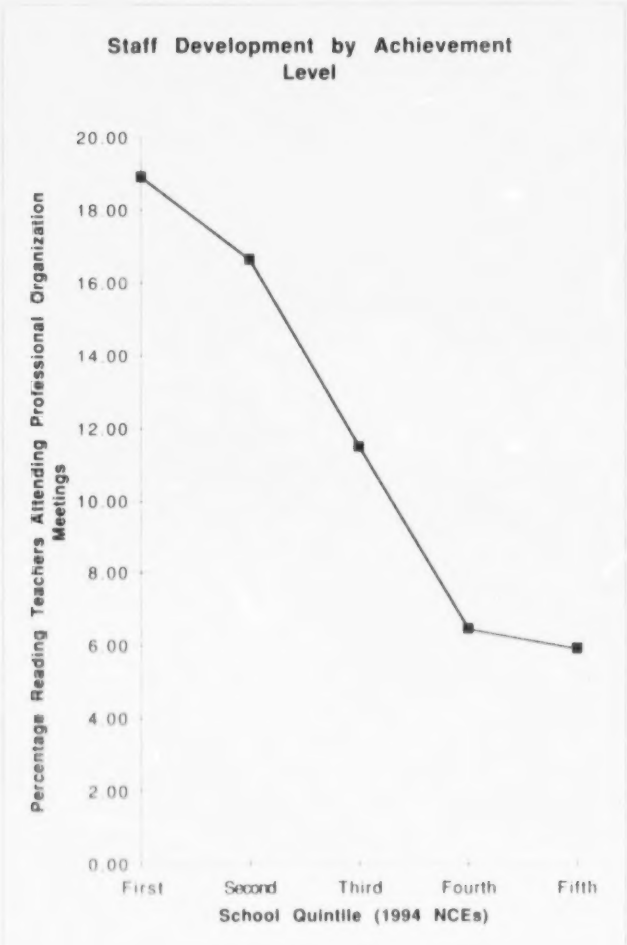


Figure 2 shows one measure of **professional development** activities by school quintile (simple averages). This measure (the average percentage of reading teachers attending the Mississippi Reading Association or other professional reading organization meetings in 1992-1993 and 1993-1994) is calculated from Question 11, Part 2, of the Questionnaire. Part 1 of this question yielded no useful information; most respondents essentially report that they have and require professional development for their reading teachers (this may be a "politically correct" answer). Part 2 of this question, however, represents a clear commitment of real resources; it takes money to send a significant proportion of reading teachers to professional organization meetings.

Figure 2



As with summer school instruction, there is a clear and consistent increase in this measure as average achievement scores increase. First Quintile schools average over three times as much proportional representation as those in the Fifth Quintile (18.9 percent vs. 5.9 percent). As with summer school instruction, a purely causal relationship is not claimed, although it is suspected that this is at least partially the case.

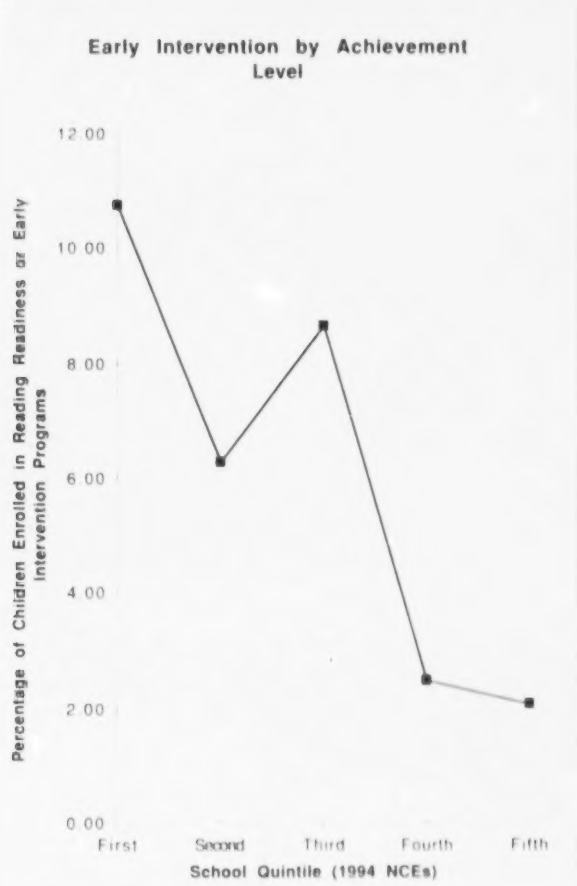
This percentage is considered a somewhat cruder measure of professional development than is the case with summer school instruction. Although principal estimates of student participation in summer school will of course include some degree of error, the question itself is at least a direct reflection of what it attempts to measure. By contrast, there are many staff development

activities for reading teachers other than those in Question 11. It follows that whatever training takes place at professional meetings may not be the primary contribution to staff development; the measure may simply reflect an overall commitment to staff development in the school.

As with summer school instruction, staff development may be an underutilized resource for many schools; this is certainly consistent with field observations in program improvement site visits. This should be a productive avenue of future research.

Figure 3 shows the percentage of children enrolled in **early intervention or reading readiness programs** by school quintile (simple averages). As in Figures 1 and 2, there is a considerable increase in this measure (calculated from Question 7, Appendix B) consistent with increasing reading achievement scores. First Quintile schools average over five times as much proportional enrollment as those in the Fifth Quintile (10.7 percent vs. 2.1 percent).

Figure 3



As with summer school instruction, this measure is at least conceptually a more direct reflection of what it attempts to measure than is the case with staff development.[7] There is clearly a need for more detailed investigation, however, since most of the enrollment in these programs will occur in grade levels prior to the first available achievement information in grade 4. It will be interesting to know whether and how the predictive value of this variable changes as the time since the intervention program increases.

Another question of great interest concerns which programs of this type are of most value and have the highest achievement/resource allocation ratios. For now, the reader will have to decide these questions. What is clear is that the highest achieving high-poverty schools devote considerably more attention to early intervention.

Tier 2 Variables

Figure 4 shows three variables deemed of probable importance but only marginally significant statistically[8] as predictors of reading achievement in high poverty schools. There is a 90 percent probability that each of these variables is correlated with reading achievement. Although this is sometimes taken as sufficient "proof" of a statistical relationship, the most common requirement by convention is for 95 percent probability. For one of these variables, this relatively weak relationship is accepted at face value; for two of these variables, it is believed better measures may yield considerably better results.

Additional instruction in the regular school year represents the major resource investment of many schools for improving reading achievement, and there is some indication of effectiveness. Schools in the First Quintile report an average of 1.5 times as much total additional instruction per child in the regular school year as schools in the Fifth Quintile (79.6 hours vs. 54.4 hours, simple averages). Nonetheless, this is less of an effect than was anticipated.

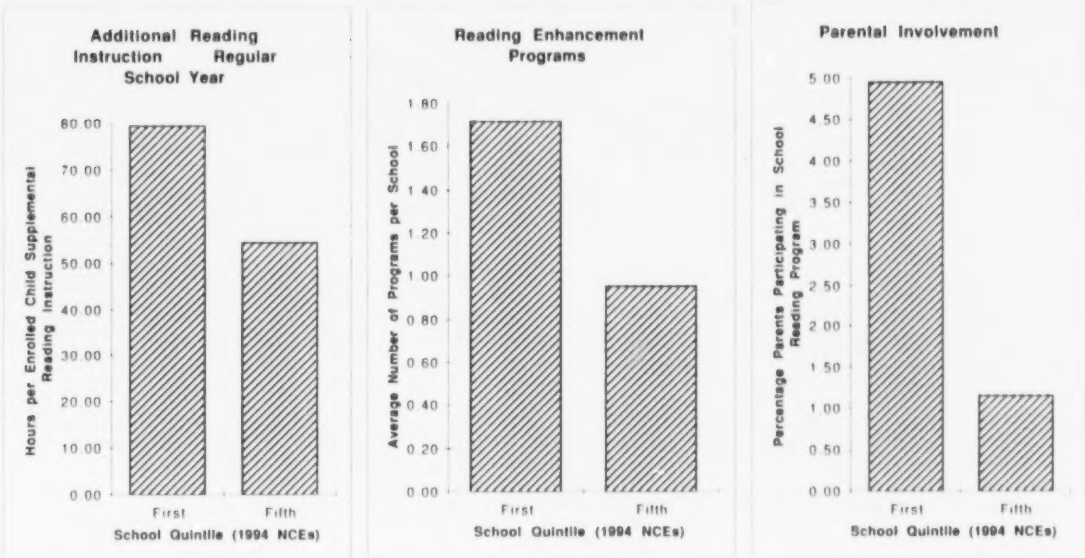
There are several possible interpretations for this result. One is that extra instruction in the regular school year is effective up to a point, but that many schools have reached a level of diminishing returns in the quantity of such instruction.

[7] (As with summer school instruction, it will still contain errors of estimation.)

[8] $r = .15$ to $.17$, $p < .09$.

Figure 4

Tier 2 Variables by Achievement Level



Alternately, it may be that a certain level of additional instruction in the regular school year is a necessary but not sufficient condition for improvement in reading scores. Fourth and Fifth Quintile schools both average 55.0 hours or less total additional instruction per child, while all of the top three Quintiles average 78.2 or higher. Perhaps a higher level of instruction is needed to keep from losing ground during the regular school year, but this will not suffice to improve scores without additional commitments such as Tier 1 Variables.

There is also a very real possibility that some principals may have been confused in attempting to answer this question (Question 3, Appendix B). Feedback from participants has indicated that some attempted to give figures for all forms of alternative instruction at the school rather than time spent on additional instruction above state minimums. To illustrate, instruction in a Chapter 1 computer lab is certainly alternative instruction, but would not be additional instruction if the student were pulled from regular reading classes to receive this instruction. It would be additional instruction if the student were pulled from study hall or remained after school. Efforts will be made to ascertain the extent of this confusion in follow-up and refined future versions of this question.

Figure 4 also shows averages for a simple count of **formal reading enhancement programs** at the schools (Question 9, Appendix B). There again appears to be some indication of an effect, with schools in the First Quintile averaging 1.8 times the number of such programs as the average for the Fifth Quintile. As stated, however, this effect was less statistically robust than that for Tier 1 Variables. It is not believed there was confusion in estimation of answers (as in the above example).

It is believed that the more interesting findings from this question will come as enough data are accumulated to analyze results by the individual categories named (*HOTS* vs. *Writing to Read*, etc.). The current sample of schools is not large enough for this determination.

Estimates of **parental involvement** on a regular basis with the reading program (Question 6, Appendix B) are also of promising usefulness. First Quintile schools average 4.3 times the percentage of estimated parent participation of Fifth Quintile Schools (5.0 vs. 1.2 percent), but the data pattern is too varied for a strong statistical effect.

It is possible that the degree of parent participation is too small at most schools to yield such an effect; there may be little change overall for these levels of involvement in the sample as a whole. It is also probable that a more focused and inclusive series of questions designed to pick out variations among schools for parental involvement needs to be developed. Given these conditions, it may well be found that parental involvement is a more important predictor of success than was demonstrated here.

Variables not Predictive of Achievement

This sample of schools shows no consistent differences by achievement level for volunteer participation, silent sustained reading time, teacher/pupil ratio, systemic reform initiatives, or classroom instructional strategies.

There were no expectations to find a correlation with systemic reform initiatives; such initiatives are often most effective over a cumulative period of time, and most of the schools involved from this sample are recent enrollees. It is surprising to find that none of the thirteen classroom instructional strategies which the questionnaire attempts to assess seems at all predictive of success. One possibility is that principals are simply not equipped to give meaningful ratings of these attributes of instruction. To obtain useful information, direct observation of instruction as it occurs may be required.

Another possibility is that considerations such as emphasis on phonics, etc., vary by grade level in their importance and are not discernible across grades in this study. Finally, it is possible that other classroom considerations such as enthusiasm and expectations are simply more important as predictors.

Lost Variables

Some measures, such as individuation of instruction (Question 2), regular/CAI coordination (Question 4), teacher reading time (Question 10), and reading for enjoyment (Question 13) do not yield sufficient variation in responses to attempt data analysis. This does not mean they are or are not important; it means that the approach to their measurement will have to be revised.

Conclusion

It should be remembered that correlation does not necessarily mean causality; to say that summer school, staff development, and early intervention predict higher reading achievement does not necessarily mean that they cause higher reading achievement. It is possible that other unmeasured variables are the common denominator for both Tier 1 Variables and higher reading scores. This can also be true and the Tier 1 Variables are at least partially causal.

It is believed this is the most likely case. One recent study[9] of achievement in high poverty schools involved a cooperative effort between the Florida Department of Education, The Educational Testing Service, and Technical Assistance Centers under contract with the United States Department of Education. In a year-long study by 40 researchers of 368 schools in 20 Florida districts, factors most important in distinguishing high achieving schools were found to be: 1) instructional leadership from the principal, 2) high expectations for students, and 3) safe and orderly learning environment.

In other words: leadership, attitude, and discipline are the best predictors of success. Although the Florida study does not examine the programmatic variables examined here, and although this study does not examine the generic variables examined in that study, the results do seem logically complementary. It is possible that dynamic leadership may be the chicken from

[9] Chapter 1 Successful Schools Pilot Project Report. Technical Report. Tallahassee, Fla.: Florida Department of Education, 1994.

which all other eggs derive; a positive, inspired principal can initiate many of the variables which in turn influence reading achievement, including teacher expectations, student discipline, and programmatic variables such as summer school, staff development, or early intervention.

Though there is encouragement to be found from initial results, final answers will not come quickly. In a true experimental design, causality is determined by randomly assigning conditions associated with a few variables to a predetermined subject population. That is not feasible in most "real world" situations of educational research. One is left with the necessity of developing and tracking as precise a set of measures as is possible for a wide range of schools over a period of years. As conditions in these schools change, attempts will be made to measure what happens before, during and after the changes.

Discussion and Recommendations

Discussion

Study 1 yields several results. Although none of these leads to definite conclusions, all offer important suggestions for our reading programs.

1) Reading achievement scores for Mississippi students in grades 4 and 6 have consistently improved in recent years, while scores for grade 8 have largely remained constant. Since most reading instruction in Mississippi occurs prior to grade 7, it is possible the increase in early grade scores represents an increase in the overall effectiveness of reading instruction in the state. If this interpretation is correct, then a question of equal concern is why this relative advantage has so far not been retained through grade 8. It is worth noting that many adverse indicators for reading achievement, such as the percentage of children living in impoverished or single parent families, have increased in recent years; in fact, an analysis of economic and social indicators alone would predict a decrease in scores for Mississippi in this time frame.

2) It is also interesting that while Mississippi students average equal or more time per pupil in reading instruction than their counterparts in the Southeast and nation, they tend to have lower average scores in reading achievement. Clearly, variables other than or in addition to time in reading instruction are important determinants of success; these might include instructional practices, staff development, parental involvement, the social environment of the students, and others. The data do not imply, however, that time in reading instruction is itself not an important variable, nor that Mississippi has necessarily "maxed out" in the gains to be expected from additional instruction. These are issues that remain to be determined.

3) Study 1 also finds considerable differences in **instructional practices** between the highest and lowest scoring districts in Mississippi.

The highest scoring districts report greater emphasis than do the lowest scoring districts on the following:

- Usage of the media center,
- Prior knowledge,
- Thematic units,
- Literature-based instruction,
- Trade books,
- "Real reading" in homework assignments and classroom, and
- The learning style of students.

The lowest scoring districts report greater emphasis than do the highest scoring districts on the following:

- Usage of basal textbooks,
- Usage of workbooks, and
- Usage of worksheets.

However, Study 1 does not suggest a cause and effect relationship between these practices and reading scores. It is not known that reading scores in the best districts are higher because these districts use basal readers less and media centers more, etc.[1] Study 1 is exploratory only and is not adjusted for other possible influential variables.

It is not clear why Study 2 fails to find similar differences in instructional practices between the highest and lowest scoring of the 107 schools in that survey.[2] As pointed out in Study 2, differences at the school level on these measures may be grade dependent. It is also possible that principals are not well equipped to give reliable answers on these measures; direct classroom observation may be necessary to detail the reading instructional practices at these schools. Since all of the schools in Study 2 are at a 90 percent poverty level or higher, greater differences might emerge for schools with less poverty.

Several variables measured at the level of individual schools are predictors of reading achievement in Study 2:

1) Total hours per student spent on **summer school instruction** and total hours per student spent on **additional instruction in the regular school year** are both correlated with reading achievement, but summer school instruction is far more predictive. As noted in this study, any effect of summer school instruction on reading achievement may be enhanced by the timing of this instruction (between school years) as much as by the quantity of instruction. If this is true, then many schools may well get more "bang for the buck" for time spent in summer school instruction than for an equal amount of time spent on additional instruction in the regular school year, at least at the average times per pupil for Study 2.

[1] For example, it is possible that reading scores are correlated with some other variable which in turn impacts instructional choices.

[2] There are no significant differences for either instructional practices or district percent poverty between schools scoring highest and schools scoring lowest on reading achievement. When the schools are ordered by district percent poverty, however, many of the same differences in instructional practices shown in Study 1 emerge between schools in the highest and lowest poverty districts, even though there are no differences in reading achievement for these schools.

What is not known are the "optimal" levels of instructional time for either summer school or supplemental regular year reading programs, that is, the level at which additional instruction begins to reach a point of diminishing return in its positive impact on reading scores. It seems likely that the optimal level will not be constant for all schools; it is likely to vary according to the needs of the students as well as the training and resources of staff. Summer school programs for schools in the highest achieving quintile of Study 2 average only 14.8 hours of instruction per enrolled child,[3] while additional regular year instruction average 79.6 hours. Despite this difference in invested resources, total summer school hours correlate higher with reading scores than do total supplemental regular instruction hours.[4]

An interpretation certainly consistent with these results is that, for the schools studied in this sample, summer school instruction is on average implemented less as an instructional alternative than is additional regular year instruction. Schools with marginal or no summer programs might do well to consider this as an alternative.

2) It would be easy to misinterpret the relatively high correlation of Study 2's **staff development** measure with reading achievement. It has been noted that this measure may be less a reflection of what teachers learn by attending a specific professional meeting outside the district than the school's overall commitment to professional development. This interpretation is reinforced by the fact that sending these teachers to such a meeting represents a commitment of school resources to staff development via a source <u>outside</u> the district's readily available (and normally cheaper) alternatives.

It is not possible to determine at this time whether staff development activities in Mississippi generated from external sources are on average more effective than those generated internally; either can be highly effective or essentially useless, and there will be overlap. Professional development activities under any circumstance should be goal oriented, coordinated with overall school direction, logically planned, and in response to clearly defined need. Activity for the sake of activity may not be productive.

[3] That is, 14.8 hours for each child enrolled in the school during regular term; since most summer programs do not include every enrolled child in summer school, the hours per summer school attendee will likely be higher.

[4] It is also not clear whether extended year instruction is equally beneficial to all students or might best be targeted to those in need of remediation.

3) The relatively high correlation of reading achievement with Study 2's **early intervention/reading readiness** measure may merit the most attention of all such variables. The reason is that this measure is a simple count of the percentage of children in each school enrolled in any program of this sort, with no corresponding description of which program or what grade level this represents. It seems certain that all such programs are not equally effective, and that effectiveness for the best programs will likely be enhanced under optimal conditions for implementation and student characteristics.

It therefore follows that when such programs are carefully chosen and implemented, their effectiveness as a predictor of reading achievement may be greater than that for most other variables examined in these studies. Many early intervention or reading readiness programs are formalized programs with a background of research and strict implementation parameters. It would seem prudent when adopting one of these programs to make a special effort to adhere as closely as possible to guidelines.

4) All of the **total number of reading programs** counted in Study 2 represent types of program delivery models for reading instruction. Since there is insufficient data to examine the effectiveness of individual programs within this category, this variable might best be interpreted as a measure of the variety of instructional approaches within the school. There is a positive correlation for this variable with reading achievement.

The reader should be careful in interpreting this result, for several reasons. First, even the highest achieving quintile of schools in Study 2 average only 1.71 such formal reading programs per school; this may indicate that some variety in programs of this type is useful, but it does not indicate at what level the addition of more programs of this type could become increasingly less effective or even detrimental. Certainly, it seems possible that attempting a large number of such programs simultaneously may lead to loss of focus for staff and students with the result that the best programs are implemented poorly.

Second, this correlation may simply indicate that the highest achieving schools, in trying more alternatives, are more likely to find something that works. In this case, it is implementing those individual programs that have real effect that makes the difference; the additional use of less effective alternatives might add little or nothing to achievement scores. As with other variables, each school must choose alternatives that make sense in the context of that school's history, needs and resources.

5) Although Study 2's measure of **parental involvement** is positively correlated with reading achievement, the strength of this association is less than was expected. As stated in that study, it is possible the measure itself may need to be refined; a more focused and inclusive series of questions exploring the full range of parental involvement may better outline relevant variations in the schools.

Another interpretation also seems likely. The reader may note that the level of parental involvement is only five percent for the highest achieving quintile of schools in this study. While this is greater than the percentage of parents involved in lesser achieving schools, this statistic is also a statement of the low levels of parental involvement overall; very few of the 90 percent poverty level schools have meaningful levels of participation by parents in their reading programs. It may be remarkable that there is any effect at all at these levels of involvement, and one wonders what effects might have been found if a substantial number of these schools had shown 20 to 30 percent of parents as participants.

The question of how to increase parental involvement is as compelling as its role in student achievement. Several of the instructional practices outlined in Study 1 may be easier to implement or may be more effective at increased levels of parental involvement. The most obvious of these practices include emphasis on "real reading" in homework assignments, integrated reading and writing, use of prior knowledge and literature-based instruction. Parents who function as volunteers may even play a role in use of the school's media center.

Recommendations

In interpreting the results of these studies, it should be remembered that differences and correlations cited represent an overall effect, and do not necessarily reflect best practice at any particular school. To say that high and low achieving schools differ on any given characteristic is a statement of probability, meaning that such differences are evident on average, but need not (will not) be evident at every individual school. Circumstances vary by school in ways that are not measured here, and the responsibility for interpreting these results in light of the individual school's history and situation must always remain local.

This is also true of individual children; because of learning styles and other differences, what constitutes the best approach to teaching one student may not be the best for all. The best teaching strategy may in fact be use of a variety of approaches, each chosen for its own strengths and match to student needs. For this reason the Mississippi Department of Education cannot "recommend" the practices or variables in these studies to every particular school or district; the Department can only provide this information to the real decision makers.

Good leadership at the local level, however, does imply a periodic review of available data on local history, performance, staff, resources, needs, and all other sources of information that may be relevant to the welfare of the children. It is hoped that the information presented will be used and will be useful in reviews of this kind. Certainly, the most relevant variables cited in these studies should be carefully considered. In Study 2 the "most relevant variables" as statistical predictors of success (with the least potentially confounding interpretations) are the following:

- Total hours per pupil summer school instruction,
- Committed staff development efforts, and
- Enrollment in early intervention/reading readiness programs.

In Study 1, as previously listed, highest scoring districts report greater emphasis than do lowest scoring districts on the following:

- Integration of reading and writing,
- "Real reading" in homework assignments and classroom,
- Parental involvement,
- Thematic units, trade books, and literature-based instruction,
- Use of media centers, and
- The learning style and prior knowledge of students.

One conclusion seems very clear: there is a compelling need for further research. As is usually the case with productive research, these studies raise as many questions as they answer. Among these are:

- The direct impact of specific instructional practices on reading achievement,
- Optimal levels of additional and supplemental instruction,
- Identification of most effective staff development efforts, and
- Evaluation of individual early intervention efforts.

Other possibly relevant variables are not adequately addressed in these studies. Among these are:

- The role and profile of effective leadership, coordination and integration of effort in the schools (cross-subject as well as among staff),
- Effective assessment and its interaction with teaching, and
- The usefulness and role of computer-assisted instruction.

Not only do these (and other) variables and their interactions need to be addressed, their measures need to be refined into a reliable and valid technology that can be optimally applied at the local level. That is, local schools and districts not only need information on what works, they also need reliable and cost-effective measures to assess their efforts. This endeavor must in turn be integrated into other programs in Mississippi, such as new assessment procedures and the potential development of a student data base.

Finally, there is a need for more direct observation of reading instruction as it occurs in the classroom. While surveys and telephone interviews are relatively fast and cost effective, there are different interpretations possible in describing instructional practices, parental involvement, etc.

Complex questions do not normally yield quick or simple answers, but they can be answered. As in teaching, what is required is caring about the children and a commitment to results.

Appendixes

Appendix A

District _____

Contact _____

INTERNAL DRAFT OFFICE USE ONLY

EMPHASIS IN READING IN MISSISSIPPI SCHOOLS

1. How much time is spent in reading instruction per day at each of the following levels?
   k (pre-reading/reading) _____(minutes)
   primary (1-3) _____(minutes)
   elementary (4-6) _____(minutes)
   middle school (7-8) _____(minutes)

2. How much time is spent in literature studies per day at grades 9-12?_____ (minutes)

Circle one reponse to each of the following questions.

3. How much emphasis is given to basal reading textbooks?
   little to none moderate heavy

4. How much emphasis is given to workbooks/ditto sheets?
   little to none moderate heavy

5. How much emphasis is given to the use of trade books in reading instruction?
   little to none moderate heavy

6. How much emphasis is placed on phonics instruction?
   little to none moderate heavy

7. How much emphasis is placed on integrating reading and writing instruction?
   little to none moderate heavy

8. How much emphasis is placed on prior knowledge in writing instruction?
   little to none moderate heavy

9. How much emphasis is placed on literature-based instruction?
   little to none moderate heavy

10. How much emphasis is placed on learning styles of students?
little to none moderate heavy

11. Is your library used as an extension of the reading program?

k (pre-reading/reading)	little to none	moderate	heavy
primary	little to none	moderate	heavy
elementary	little to none	moderate	heavy
middle school	little to none	moderate	heavy
high school	little to none	moderate	heavy

12. How much emphasis is placed on reading technology?
little to none moderate heavy

13. How much emphasis is placed on technology communication?
little to none moderate heavy

14. How much emphasis is placed on thematic units?
little to none moderate heavy

15. How much emphasis and follow through is placed on "real reading" (books, magazines, newspapers)?
little to none moderate heavy

16. How much emphasis is placed on time for "real reading" per day in the classroom?
little to none, moderate heavy

Appendix B

School Survey-Reading Program

Date: _____ Contact: _____ Position: _____
School:_____ Grade Span: _____ Enrollment: _____

1) How long have (you) been principal at this school? Since SY_____
If less than 3 years, what was the tenure of the former principal? SY_____to SY _____

2) Does your school maintain a profile for each student that gives individual strengths, weakness and needs in reading? ___Y ___N Did you do this last year? ___Y ___N
If so, is instruction at your school regularly adjusted to match individual profiles?
___Y ___N Did you do this last year? ___Y ___N

3) What programs for additional instruction in reading exist at the school beyond the minimums required by state regulations?

Program 1	Check all that apply:			
__CAI	__Bef./Aft.Sch.	__Tutorial	__Chap. 1	__Other
	No. Participants_____		Min./Day/Part._____	
Participation last year:	No. Participants_____		Min./Day/Part._____	

Program 2	Check all that apply:			
__CAI	__Bef./Aft.Sch.	__Tutorial	__Chap. 1	__Other
	No. Participants_____		Min./Day/Part._____	
Participation last year:	No. Participants_____		Min./Day/Part._____	

Program 3	Check all that apply:			
__CAI	__Bef./Aft.Sch.	__Tutorial	__Chap.1	__Other
	No. Participants_____		Min./Day/Part._____	
Participation last year:	No. Participants_____		Min./Day/Part._____	

Program 4	Check all that apply:			
__CAI	__Bef./Aft.Sch.	__Tutorial	__Chap. 1	__Other
	No. Participants_____		Min./Day/Part._____	
Participation last year:	No. Participants_____		Min./Day/Part._____	

Did you have a summer program for reading in 1994? ___Y ___N
Duration in weeks:_____ No. Participants_____ Min./day/part._____

Did you have a summer program for reading in 1993? __Y __N
Duration in weeks:_____ No. Participants_____ Min./day/part._____

4) Are student profiles (print outs) for Computer Assisted Instruction in reading used by each student's teachers to follow student progress in the CAI Program? ___Y ___N
Did you do this last year? ___Y ___N
Is the CAI instruction adjusted to match the skills being taught in the regular classroom?
___Y ___N Did you do this last year? ___Y ___N

5) About how many volunteers (including parents) are actively involved in the reading program? Last year?
Do staff members, other than teachers, read to students on a regular basis? ___Y ___N
Any change from last year? ___Y ___N

6) Do you have a program for involving parents in the Reading Program at your school?
___Y ___N
How many parents actively participate on a regular basis?
Any change from last year?

7) Does your school have any reading readiness or early intervention programs for pre-K-2?
___Y ___N
List the approximate number of participants: _____
Any change from last year?

8) Have you implemented any formalized school reform initiatives, such as Onward To Excellence or Chapter 1 Schoolwide reform?

Name/Type	Date initiated at this school

9) Have you implemented any innovative programmatic initiatives in reading (examples: Reading Recovery, HOTS-Higher Order Thinking Skills, Writing to Read, Writing to Write, Books and Beyond, Project Read, CIRC-Cooperative Integrated Reading, CRISS-Content Reading Including Study Systems, etc.):

Name/Type	Date initiated at this school
__ Books and Beyond	_____
__ CIRC	_____
__ CRISS	_____
__ HOTS	_____
__ Integrated Reading	_____
__ Project Read	_____
__ Reading Recovery	_____
__ Writing to Read	_____
__ Writing to Write	_____
__ _____	_____
__ _____	_____

10) How long is your silent sustained reading time? _____Min./day
Do the teachers have a set time to read to the students? ___Y ___N
Any change from last year?

11) Do you have professional development activities specific for your reading teachers?
___Y ___N Is this required or volunteer? ___R ___V
Any change from last year?
How many of your reading teachers attended the Mississippi Reading Association or other professional reading organization meetings last year? ____ of ____
How many in the 1992-93 SY? ____ of ____

12) What is the average teacher pupil ratio in your reading classes? _____
Any change from last year?

13) Does your school have an organized program for encouraging sheer quantity of reading for enjoyment? ___Y ___N (Example: challenges or contests with extrinsic awards)
Describe:

Did you have such a program last year? ___Y ___N

14) Finally, I am going to read you a short list of attributes that may or may not characterize the reading program at your school. As I read each one, please tell me how much emphasis you think your reading program places on it by characterizing it as one of the following:

Little to none moderate heavy

How much emphasis is given to basal reading text books?
Little to none moderate heavy
Any change from last year?

How much emphasis is given to workbooks/ditto sheets?
Little to none moderate heavy
Any change from last year?

How much emphasis is given to use of trade books?
Little to none moderate heavy
Any change from last year?

How much emphasis is placed on phonic instruction?
Little to none moderate heavy
Any change from last year?

How much emphasis is placed on whole language instruction?
Little to none moderate heavy
Any change from last year?

How much emphasis is placed on integrated reading and writing?
Little to none moderate heavy
Any change from last year?

How much emphasis is placed on prior knowledge in writing instruction?
Little to none moderate heavy
Any change from last year?

How much emphasis is placed on literature-based instruction?
Little to none moderate heavy
Any change from last year?

How much emphasis is placed on learning style of students?
Little to none moderate heavy
Any change from last year?

How much emphasis is placed on thematic units?
Little to none moderate heavy
Any change from last year?

How much emphasis is placed on "real reading" (books, magazines, newspapers) in homework assignments?
Little to none moderate heavy
Any change from last year?

How much emphasis is placed on time for "real reading" per day in the classroom?
Little to none moderate heavy
Any change from last year?

Is your library used as an extension of the reading programs?
Little to none moderate heavy
Any change from last year?

15) Is there anything else that we haven't discussed that you feel is relevant to the reading program at your school?